
Indigenous Peoples and REDD+: A Critical Perspective

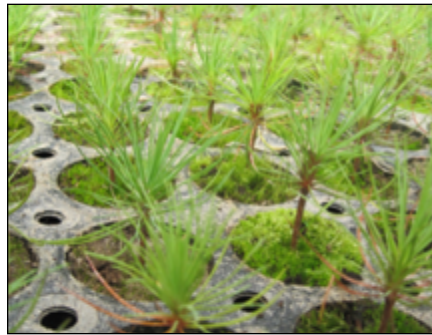


**Indigenous People's Biocultural Climate Change
Assessment Initiative**

November 2014



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This reports uses the terms REDD and REDD+ interchangeably to refer to the overarching but constantly evolving concept of Reducing Emissions from Deforestation and forest Degradation.

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List of Acronyms

AIDSEP	Asociación Interétnica de Desarrollo de la Selva Peruana Inter-Ethnic Association for the Development of the Peruvian Amazon
AWG-LCA	Ad hoc Working Group on Long-Term Cooperative Action
BNDES	Banco Nacional do Desenvolvimento Brazilian Development Bank
CARE	Asháninka Center of the River Ene
CCB	Climate, Community, and Biodiversity standards
CDM	Clean Development Mechanism
CERs	Certified Emissions Reductions
CI	Conservation International
CICC	Comité Interinstitucional de Cambio Climático Inter-Institutional Committee on Climate Change, Ecuador
CIFOR	Center for International Forestry Research
COASNA	Comité Asesor Nacional National Advisory Committee, Ecuador
COICA	Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica Coordinator of Indigenous Organizations of the Amazon River Basin
CONAFOR	Comisión Nacional Forestal National Forestry Commission, Mexico
CONAIE	Confederación de Nacionalidades Indígenas del Ecuador Confederation of Indigenous Nations of Ecuador
CONAP	Confederación de Nacionalidades Amazónicas del Perú Confederation of Amazonian Nationalities of Peru
COP	Conference of the Parties
EU ETS	European Union's Emissions Trading Scheme
FAO	Food and Agriculture Organization of the United Nations
FCFP	World Bank's Forest Carbon Partnership Facility
FENAMAD	Federación Nativa del Río Madre de Dios y Afluentes Federation of the Native Peoples of the River Madre de Dios and its tributaries, Peru
FIP	World Bank's Forest Investment Program
FPIC	Free, Prior and Informed Consent

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GCF	Governor's Climate and Forests Task Force
GFC	Guyana Forestry Commission
GHG	Green House Gas
GRIF	Guyana REDD+ Investment Fund
ICDPs	Integrated Conservation and Development Programs
IDB	Inter-American Development Bank
IMF	International Monetary Fund
IPs	Indigenous Peoples
IPCC	Intergovernmental Panel on Climate Change
IPCCA	Indigenous People's Biocultural Climate Change Assessment Initiative
IPPFCC	Indigenous Peoples' Partnership on Forest Climate Change
IWGIA	Indigenous Working Group for Indigenous Affairs
JI	Joint Implementation
LCDS	Low Carbon Development Strategy
MAE	Ministerio del Ambiente de Ecuador Ministry of the Environment of Ecuador
MRV	Measurement, Reporting and Verification
MoU	Memorandum of Understanding
NGO	Non-Governmental Organization
OCBR	Órgano de Coordinación de Bosques y REDD+ Coordinating Body for Forests and REDD+, Peru
PES	Payments for Ecosystem Services
PFM	Participatory Forest Management
R-PP	Readiness Preparation Proposal
RED	Reducing Emissions from Deforestation
REDD+	Reducing Emissions from Deforestation and forest Degradation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SEMARNAT	Secretaría del Medio Ambiente y Recursos Naturales Secretariat of Environment and Natural Resources, Mexico
SES	Social and Environmental Standards

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SISA	System of Incentives for Environmental Services
UN	United Nations
UNDP	United Nations Development Program
UNDRIP	United Nations Declaration on Rights of Indigenous Peoples
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNPFII	United Nations Permanent Forum on Indigenous Issues
USAID	United States Agency for International Development
VCS	Verified Carbon Standard

Executive summary

REDD+ stands for *Reducing Emissions from Deforestation and forest Degradation* in developing countries (REDD) and includes conservation, sustainable forest management and the enhancement of carbon stocks (the +). An international initiative negotiated under the United Nations Framework Convention on Climate Change (UNFCCC), REDD+ has been proposed as a central strategy for mitigating climate change in forests. While advocates highlight the cost effectiveness and social and ecological co-benefits that can be generated through REDD+, many indigenous and forest dependent groups have expressed concerns about the potential effects of projects on their access to land and resources. This report identifies key issues facing indigenous and forest-dependent communities with respect to REDD, and is based on existing academic literature and more current reports by NGOs and indigenous organizations. We first lay out a brief history of REDD+, interrogate its key assumptions, and discuss major issues of concern. We then discuss REDD+ as it relates to indigenous peoples and forest-dependent communities. This is followed by a series of case studies of developing countries participating in REDD+. We conclude with a discussion of the principal elements for an alternative vision for REDD+ that takes seriously the rights of indigenous peoples.

History and Central Issues

REDD+ is a concept in flux that has evolved over time from 2005 when the Coalition of Rainforest Nations first proposed RED (Reducing Emissions from Deforestation) in developing countries to the most recent agreements on REDD+ articulated in the Warsaw Framework (COP 19). REDD+ has made some progress through discussions and agreements around safeguards, financing and Measurement, Reporting and Verification (MRV). However, to date, there are important questions about finance, co-benefits and land tenure that have yet to be resolved. In addition, the language on safeguards intended to protect forest-dependent communities remains weak.

With regards to finance, it is widely agreed that massive funding will be required to catalyze and sustain REDD. However, to date, the amount of funds pledged and disbursed has been far below the annual \$5-10 billion some scholars argue is necessary to establish a successful REDD program. Drawing on the work of numerous scholars,¹ we recommend a carbon tax as the main finance mechanism for a climate fund. The carbon tax need not be severely regressive if a portion of the tax revenue is returned to the public in order to offset the cost. Although carbon taxes have historically been considered politically unfeasible, the urgency of climate change action has caused policymakers to reevaluate the value in this approach. The International Monetary Fund (IMF) Managing Director, Christine Lagarde, for example, has argued in favor of a carbon tax to accelerate emissions reductions and fund mitigation activities².

The governance of REDD+ has been complex due to the difficulty of harmonizing the

¹ Andrew, 2008; Hsu & Bauman, 2012; Nordhaus, 2008

² Volcovici, 2014

different perspectives on forest management across scales and contexts. While local common property arrangements have demonstrated widespread success in forest management, the emphasis on the national administration of forests has led to some concerns regarding the recentralization of forest governance³ and the potential of state-led “green” land grabs for REDD+.⁴

Another important area of debate in REDD+ concerns the techniques to measure, monitor, report, and verify not only the amount of carbon sequestered through avoided deforestation and forest enhancement activities, but also the co-benefits generated through REDD+ or what are also known as the “non-carbon” aspects of REDD+. However, MRV has largely focused on the monitoring of carbon over the social and ecological dimensions, which are particularly important to indigenous and forest-dependent communities.

Standards and safeguards have been established to ensure quality and credibility of carbon offsets on the Clean Development Mechanism (CDM) and voluntary carbon markets, and include carbon, social and ecological project aspects. The REDD+ Social and Environmental Standards (REDD+SES) were recently developed by a consortium of stakeholders including national and subnational governments in Latin America, Asia and Africa to evaluate non-carbon and co-benefit dimensions of REDD projects and to monitor and report on safeguards. It aims to ensure the rights of local communities and indigenous peoples. However, based on the experience with other co-benefit standards (such as Climate, Community & Biodiversity Standards), there is concern that the REDD+SES will be insufficient to adequately protect the rights of indigenous peoples.

A critically important issue for indigenous peoples concerns land, specifically how REDD will affect land tenure and access to forest resources. REDD+ has illuminated the lack of clear and formalized forest tenure in many developing countries, and it is uncertain how REDD will intersect with land conflicts and disputes. The Indigenous Peoples’ Partnership on Forests and Climate Change (IPPFCC) has stated that the failure of states to recognize indigenous peoples’ territories and resources not only violates their most basic rights, but also represents the “major source of conflicts between indigenous peoples and the state.”⁵ However, if carried out effectively, REDD+ could become an important vehicle for resolving pending land claims and obtaining formal state recognition of indigenous peoples.

Key Assumptions of REDD+

There are several key assumptions associated with REDD+ regarding cost efficiency, drivers of deforestation and delivery of co-benefits.

1. The first assumption suggests that REDD+ is a highly cost-effective strategy for carbon reductions. However, once opportunity costs and costs of MRV and institutional arrangements of forest governance are included, REDD has proven to be quite expensive to implement. Furthermore, only financial costs are included in

³ Pokorny, Scholz, & Jong, 2013

⁴ Di Gregorio et al., 2013

⁵ Riamit & Tauli-Corpuz, 2012, p. 13

project calculations. The social, cultural and spiritual values of forests are largely ignored.

2. The second assumption suggests that REDD+ will have a significant impact on climate change through the reduction of deforestation and forest degradation. This assumption is challenged on the basis that REDD may be exchanged on an offset market where reductions in forests are traded for continued emissions from industrial sectors in the Global North. In addition, there are valid concerns that REDD fails to address the main drivers of deforestation and forest degradation, such as large-scale commercial agriculture, cattle ranching and timber harvesting.
3. The third assumption suggests that REDD can achieve both market efficiency as well as sustainable development and local co-benefits. However, scholars have identified fundamental tradeoffs between market efficiency and sustainable development, with the former (market efficiency) consistently receiving priority⁶. While some researchers argue that carbon forestry projects under common property arrangements can lead to greater local benefits,⁷ empirical studies have demonstrated that the presence of carbon markets can weaken the institutional social controls communities use to manage forest commons, thereby compromising the effectiveness of collective action.⁸

Indigenous Concerns

In this report, we also discuss critical issues specifically pertaining to indigenous peoples in relation to REDD+. Issues raised in the literature or in reports by indigenous groups include: risks of exclusion from forests and restrictions on resource access; the form and distribution of benefits; the establishment of effective safeguards; meaningful participation; and fundamental concerns over the commodification of nature. Indigenous peoples have participated in international negotiations as a means to influence the direction and scope of REDD and to ensure indigenous rights are respected and secured. Furthermore, the practices and traditional ecological knowledge of indigenous peoples may provide guidance on REDD, not simply as a mitigation and adaptation strategy, but also as a long-term sustainable land-use plan. Finally, many indigenous peoples have expressed concerns about the ways in which carbon markets commodify nature. A market-based view prioritizes cost-effective strategies and the commodification of ecological services, thereby utilizing the same economic tools and logic that arguably constitute the underlying source of the climate change problem. The failure of many projects based on market logic suggest a need to consider a radically different approach if we are to effectively and equitably tackle climate change. The concept of *Buen Vivir* (literally “good living”) offers an important perspective for reimagining and creating a new vision for development driven not by capital accumulation but by a deep understanding of the interrelationships between humans and nature. Furthermore, this indigenous bio-cultural and ecosystems approach emphasizes respect for human rights, ecological integrity, and the generation of non-carbon benefits over cost concerns.

⁶ Olsen, 2007

⁷ Chhatre & Agrawal, 2009

⁸ Brown & Corbera, 2003; Osborne, *in review*

Country Profiles

Following the discussion of indigenous peoples' concerns related to REDD, we present seven case study profiles of countries involved in various stages of REDD+. The cases presented include Mexico, Indonesia, Guyana, Peru, Ecuador, Tanzania, and Brazil. Each one reflects a unique context for indigenous people's relationship to REDD. For each case, we provide the country background with respect to REDD, challenges to implementation, and issues particular to indigenous communities.

Approaches for an Alternative REDD+ Vision

In the last section we discuss central components of an alternative vision for REDD. Elements include collective action, a rights-based approach, a biocultural approach, and a non-market approach.

Collective action: Research on collective action has demonstrated that communities can successfully manage common pool resources such as forests provided a number of design principles are in place. Elinor Ostrom, winner of the Nobel Prize in Economics in 2009, identified 8 design principles critical for the success of common property resource management⁹. They include:

1. **Boundaries** – *Boundaries should be clearly defined and recognized.*
2. **Proportionality** – *Costs of management should be proportional to the benefits.*
3. **Collective choice** – *Rules should be made by the resource users themselves.*
4. **Monitoring** – *A system must be in place to track people's behaviors.*
5. **Sanctions** – *Individuals who break established rules must face consequences.*
6. **Conflict resolution mechanisms** – *Conflict between users should be resolved.*
7. **Recognition of rights to organize** – *Communities must have sufficient autonomy to make decisions apart from non-local authorities.*
8. **Nested Enterprises** – *Nesting of institutions demonstrates that all levels of governance have an important and legitimate role to play.*

In relation to REDD, a collective action approach suggests that in cases where communities have demonstrated the ability to successfully manage forest systems, they should be given the right to continue their unique forms of governance without interference from non-local users.

Rights-based approach: According to numerous indigenous reports and academic studies, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) should guide all aspects of REDD and inform safeguard policies. Indigenous peoples have a right to participate in REDD and/or carbon markets (if they so choose), but through FPIC ('Free prior and informed consent'), they also have a right to be fully informed and to oppose participation altogether. For indigenous peoples, human rights are directly related to territory. Therefore, recognizing indigenous rights to territory and resolving land tenure conflicts should be a prerequisite for participation in REDD.

⁹ Ostrom, 1990

Biocultural approach: Also critical to an indigenous REDD is an ecosystem-based, biocultural approach. This approach highlights the relationship indigenous peoples have with their environments and the wealth of traditional ecological knowledge they have acquired over generations. It also reflects a dynamic and dialectical relationship between people and the environment. In addition, a biocultural approach is ecosystem-based rather than market-based¹⁰. Forests are recognized for their social, cultural, economic and spiritual values that cannot be adequately represented in monetary terms alone.

Non-market approach: A non-market approach to REDD recognizes the multiple values of forests beyond their economic and carbon values. This approach also questions the use of global carbon markets as the main financial mechanism for guiding the management of forest ecosystems. It highlights concerns about the commodification of land and forests, which can result in the loss of indigenous sovereignty over their territory and/or reduced access to forest resources. Although the finance mechanisms for REDD have yet to be formally decided, the market model has acquired significant traction in international and national arenas. Nearly all mitigation strategies reflect an orientation to the market, as seen in the flexibility mechanisms of the UNFCCC, the carbon market approach of the World Bank's Forest Carbon Partnership Facility (FCPF), and the standardization of MRV and rigorous carbon calculations in REDD-readiness activities consistent with requirements for a future market.¹¹ Therefore, a non-market approach would not include carbon markets as the main financial mechanism for REDD.

Instead we suggest economy-wide carbon taxes in industrialized countries, the revenue of which could provide support for the UN Green Climate Fund. A portion of this fund (equivalent to the percentage of emissions from deforestation and degradation) could go toward REDD+ activities. The Ad hoc Working Group for Long-Term Cooperative Action (AWG-LCA) under the UNFCCC in 2009 proposed establishing a REDD+ window within the Green Climate Fund to support and finance all phases of REDD+, and is advocated by numerous environmental groups such as Greenpeace.

Conclusion

This report clearly calls into question the use of market mechanisms for delivering important conservation and community development co-benefits. The gravity of climate change and its deep interconnection with capitalism (Klein 2014¹²) demands radical shifts in our current market-oriented approaches. In the short term, we propose a carbon tax that would support a fund for successful policies and efforts that reduce and avoid forest-based emissions. In the long term, we ultimately need to work toward imagining a different future, one based on a new paradigm, which foregrounds ideas of collective action, indigenous rights and bioculturalism, and prioritizes the needs of communities over the requirements of the market. An indigenous, bio-cultural approach does just that, and must be incorporated into the design of any just and effective climate change mitigation strategy for forests.

¹⁰ IPCC, 2013

¹¹ Riamit & Tauli-Corpuz, 2012

¹² Klein 2014

1. History and Central Issues



Introduction

Increasing carbon emissions and devastating impacts of climate change around the world have galvanized the international community to take action. One climate change mitigation strategy receiving significant attention is REDD+. An international initiative negotiated under the United Nations Framework Convention on Climate Change (UNFCCC), REDD+ provides financial incentives to governments and landowners in developing countries to reduce carbon emissions in forest systems. REDD+ stands for *Reducing Emissions from Deforestation and forest Degradation* in developing countries (REDD) and includes conservation, sustainable forest management and the enhancement of carbon stocks (the +). As emissions from forest loss and degradation have represented as much as 17% of global greenhouse gas (GHG) emissions¹³, sustainable management of forest ecosystems can play a significant role in mitigating climate change.

REDD+ represents the first attempt to formally integrate avoided deforestation into international climate change efforts. Although initially considered in the negotiation of the Kyoto Protocol, avoided deforestation was eventually removed from this effort due to technical, institutional and social challenges. As a result, the Kyoto Protocol's Clean

¹³ IPCC 2007, Agrawal, Nepstad, & Chhatre, 2011

Development Mechanism¹⁴ was constrained to afforestation and reforestation activities and in effect failed to address the root causes of deforestation. Given the seriousness of climate change and the contribution of forest loss to global emissions, proponents have been keen to advance the REDD+ initiative. However, REDD+ has been highly controversial, particularly for indigenous and forest-dependent communities concerned about the potential impacts of carbon forest activities on their land rights, livelihood practices, and access to resources, as well as how equitably the benefits of REDD+ might be distributed among stakeholders. We argue that at the heart of the REDD+ debate are fundamental differences between indigenous worldviews and the commodification of nature. This report grapples with these contradictions and attempts to identify potential avenues for the effective and equitable reduction of carbon emissions in forest ecosystems on which indigenous and forest-dependent communities rely.

This report identifies key issues associated with REDD+ as they relate to indigenous and forest-dependent communities. In this first section, we will first provide a brief history of REDD+, and discuss major issues of concern. In section 2, we then interrogate key assumptions of REDD+. We will then discuss REDD+ as it relates to indigenous peoples and forest-dependent communities in section 3. This will be followed by a series of case studies profiles featuring developing countries involved in REDD+. In section 5, we will conclude with a discussion of the principal elements for an alternative vision for REDD+ that takes seriously the rights of indigenous peoples.

Brief History and Central REDD+ Issues

In light of challenges within past climate negotiations regarding avoided deforestation, REDD+ has evolved to accommodate a broad range of interests across the Global North and South. In 1992, the UN Framework Convention on Climate Change (UNFCCC) recognized the importance of terrestrial and marine ecosystems as sinks and reservoirs of carbon and promoted sequestration and conservation in forests as a mitigation strategy for climate change. Nonetheless, avoided deforestation, along with the role of developing countries in climate change mitigation, proved to be a highly contentious issue that nearly led to the collapse of the Kyoto negotiations.¹⁵ In the end, avoided deforestation was excluded from the Kyoto Protocol primarily due to technical concerns over additionality¹⁶, leakage¹⁷, permanence¹⁸ and the challenges of measuring forest carbon. These technical issues, along with the higher than anticipated transactions costs associated with the afforestation and reforestation activities permissible under the CDM, have resulted in the small percentage

¹⁴ The Clean Development Mechanism (CDM) is a flexibility mechanism that allows industrialized countries to reduce a portion of their emissions in the developing world through project-based activities.

¹⁵ Pistorius, 2012

¹⁶ Additionality signifies the degree to which emission reductions are additional and would not have occurred in the absence of the carbon offset project.

¹⁷ According to the IPCC, leakage “refers to the situation in which a carbon sequestration activity (e.g., tree planting) on one piece of land inadvertently, directly or indirectly, triggers an activity which, in whole or part, counteracts the carbon effects of the initial activity” (Metz et al. 2001 pg. 331).

¹⁸ In the *Land use, Land-use Change and Forestry* report, the IPCC defines permanence as “The longevity of a carbon pool and the stability of its stocks, given the management and disturbance environment in which it occurs” (Watson 2000, pg. 20).

(less than 1%) of forest projects registered under the CDM.¹⁹ As avoided deforestation remains excluded from the CDM, these projects have been largely implemented through the much smaller voluntary market.

Avoided deforestation gained traction in 2005 due to growing recognition of the contribution of deforestation and forest degradation to global carbon emissions and the assumed cost-effectiveness of forest-based activities.²⁰ In 2005, Reducing Emissions from Deforestation (RED) was formally introduced at the 11th Conference of the Parties (COP 11) in Montreal by the Coalition for Rainforest Nations (Papua New Guinea, Costa Rica, and 8 other countries). They proposed using a *compensated reduction* approach, which involves providing performance-based payments that reward countries and landowners for reducing deforestation and increasing forest carbon. This proposal received broad-based support from countries at the COP because it was perceived as a flexible and cost-effective approach that would allow developing countries to participate voluntarily without hindering their economic growth.²¹ RED was also recognized for its potential to provide social and ecological co-benefits such as sustainable development for indigenous and forest-dependent communities, as well as biodiversity and hydrological benefits. Although the initial RED proposal had no mention of indigenous peoples' rights,²² it was generally seen as a "triple win" for climate, local communities and biodiversity.²³

At COP-13 in 2007, following recommendations from proposals and workshops carried out over the previous two years, forest degradation (adding the second 'D' to REDD) was formally introduced in the Bali Action Plan. This plan also recognized the role of conservation, sustainable management of forests and enhancement of forest carbon stocks²⁴. A year later at COP 14 in Poznan, the plus was officially incorporated to represent these additional activities and the need for a more inclusive REDD.

Although COP-15 in Copenhagen was widely considered a failure, the Copenhagen Accords acknowledged the importance of REDD+ for climate change mitigation and emphasized the necessity for "substantial finance" from developed countries for REDD+ activities. The Copenhagen Green Climate Fund and the carbon market were both proposed as potential funding sources for REDD+. Despite extensive discussions of the need to provide substantial financing for REDD+, disagreements among party members produced low levels of funding commitment at the international level and resulted in an emphasis on national strategies supported through bilateral and multi-lateral funds.²⁵

¹⁹ Thomas et al., 2010

²⁰ Hiraldo & Tanner, 2011

²¹ Pistorius, 2012

²² Wallbott, 2014

²³ Pistorius, 2012

²⁴ Hiraldo & Tanner, 2011

²⁵ Pistorius 2012

While the draft emerging from the Ad Hoc Working Group on Long-Term Cooperative Action²⁶ (AWG-LCA) at Copenhagen addressed safeguards²⁷, it used vague language to define the safeguards along with merely a ‘request that safeguards be supported.’²⁸ Safeguards in REDD+ are meant to address issues of transparency, national sovereignty, respect for the rights and knowledge of indigenous peoples (in accordance with the United Nations Declaration on the Rights of Indigenous Peoples), and include activities that enhance environmental and social benefits.

Although continuing to move away from a unified global mechanism, REDD+ was at the center of COP 16 discussions between governments, the private sector and civil society NGOs, where both bilateral and multilateral REDD+ processes outside of the UNFCCC were legitimized. The COP 16 meeting produced the Cancun Agreements, which aimed to address the drivers of deforestation, developed procedures for REDD Readiness²⁹ and determined a three-phase approach³⁰ to prepare developing countries for REDD+. Although social and environmental safeguards were discussed and agreed upon, much of the language on safeguards in the Cancun Agreements remained weak, and the specific section on safeguards was included only as an Annex, much to the dismay of many NGO and indigenous observers.

The Green Climate Fund was also established at COP 16. The following year at COP 17 in Durban, a governing structure for the fund was decided. The Green Climate Fund aims to raise US\$ 100 billion per year by 2020 for mitigation and adaptation efforts in the developing world. To date, only a fraction of this amount has been pledged and there is uncertainty about how the fund will secure long-term support.

Negotiations during COP18 held in Doha, Qatar, in 2010 were expected to tackle unresolved issues around safeguards, MRV, indigenous peoples’ rights and non-carbon benefits. However, there were no formal decisions made in these key areas. This led groups such as the Forest Peoples’ Program to call the outcomes of COP 18 “disappointing for indigenous peoples”³¹ due to negotiators inability to reach decisions on REDD in general and clarify issues related to indigenous peoples more specifically.

²⁶ The UN-REDD approach has two parallel working tracks: 1) The SBSTA works on long-term methodological issues and 2) The Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) initiates consideration of policy approaches and positive incentives related to REDD (Wallbott, 2014).

²⁷ “Safeguards” refers to precautionary procedures that ensure REDD+ activities do not negatively impact people or the environment.

²⁸ UNFCCC 2009. Ad Hoc Working Group on Long-Term Cooperative Action under the Convention. Eighth session. Copenhagen, 7-15 December 2009.

²⁹ Elements of REDD Readiness include 1) A national REDD+ strategy or plan; 2) a national reference level where countries define a baseline for emissions from deforestation and degradation against which future emission reductions will be measured and compensated; and 3) a forest monitoring, reporting and verification system for carbon stores, as well as methods for measuring compliance with REDD+ safeguard requirements.

³⁰ The three-phases of REDD+ based on the Cancun Agreement include 1) REDD-Readiness to build institutional capacity within countries, 2) the establishment of finance mechanisms to access funding, and 3) the receipt of performance based funding.

³¹ Forest Peoples’ Program, 2013

Perhaps the most concrete accomplishment to emerge from COP19 was the Warsaw Framework, a package of seven decisions related to REDD+ that builds on the Cancun Agreements. While the Warsaw Framework included firm agreements on results-based finance, establishing baselines, technical points for MRV, and safeguards, it draws on similarly weak legal language as in previous REDD documents by only ‘encouraging’ parties to take actions to address the drivers of deforestation³². Finance for REDD+ received significant attention at Warsaw, and both market and non-market mechanisms (including the Green Climate Fund) were deemed legitimate forms of finance. In this vein, with support from Norway, the UK and US, the \$280 million BioCarbon Fund Initiative for Sustainable Forest Landscapes was launched, which is a fund managed by the World Bank to reduce agriculture-driven deforestation. This fund aims to incentivize land use change based on an integrated landscape approach that simultaneously addresses deforestation, agriculture, and sustainable development.³³ Nonetheless, while some interpret the Warsaw Conference agreements as a positive indicator that REDD+ is receiving broad international support³⁴, others note that the COP agreements are still overrun with vague commitments from developed countries while developing countries are required to fulfill an ever-growing list of obligations in order to receive climate finance³⁵. In other words, REDD+ is still fraught with scientific, technical, economic and political challenges.³⁶ In addition, although COP19 led to an agreement that REDD+ require “adequate and predictable payment,”³⁷ it did not provide a definitive answer regarding *who* will finance REDD over the long-term and *how*, if left to the carbon market, payments will be stabilized in spite of the constant fluctuations of carbon prices.³⁸

In addition to questions of finance, issues of REDD+ governance, land tenure, and MRV are among the most challenging issues for forest dependent and indigenous peoples. We discuss these issues in greater detail below. Future COP meetings will need to address these concerns if REDD+ is to move forward in an effective and equitable way. This report draws on existing research on REDD+ and presents key concerns in order to assist interested parties in the design of an alternative vision for REDD+ that takes seriously the concerns of forest dependent and indigenous communities.

REDD+ Finance

It is widely acknowledged that massive funding will be needed to catalyze and sustain adequate payments for REDD+ into the future.³⁹ Along with other studies, the Stern Review on the Economics of Climate Change concludes that between US \$17 billion and \$33 billion will be required on an annual basis in order to halve carbon emissions from forests by the

³² UNFCCC 2013. Warsaw Framework for REDD-plus. COP 19.

³³ Leonard, 2013

³⁴ Code REDD, 2012

³⁵ Visseren-Hamakers et al., 2012; Wallbott, 2014

³⁶ Leonard, 2013

³⁷ Warsaw Framework: Work programme on results-based finance to progress the full implementation of the activities referred to in decision 1/CP.16, paragraph 70. 2013

³⁸ Lang, 2013g

³⁹ Pokorny et al., 2013; Rival, 2013; Seymour & Angelsen, 2012

year 2030. Grieg-Gran suggests a minimum of US\$5 - \$10 billion annually is necessary to significantly reduce emissions from deforestation.⁴⁰ However, to date, the REDD+ funds pledged for the period 2006-2018 amount to only US\$6.9 billion total (US\$530 million/year), indicating a drastic shortfall in REDD+ funding.⁴¹

The future financing mechanisms for REDD+ have been the subject of intense debate in international climate negotiations and are yet to be formally determined. While both market and non-market (e.g. designated funds) mechanisms are being considered for REDD+, market mechanisms tend to be prioritized in international negotiations, particularly by Global North countries. This lack of clarity regarding the source, amount and structure of REDD+ financing greatly destabilizes the long-term viability of REDD+ programs.

To date, most REDD+ funding available has been dedicated to REDD-Readiness and REDD pilot activities. Between 2007-2012, US\$2.78 billion was pledged through seven different funds.⁴² Norway has led efforts to create financing for REDD+, contributing 58% of the funds pledged thus far, followed by much lower pledges from the UK, Australia, and the United States. Norway has also supported Brazil's Amazon Fund, Guyana's REDD+ Investment Fund for Low Carbon Development, and the UN-REDD fund to support National REDD+ program development in 18 partner countries including Indonesia, Ecuador, the Congo, and Tanzania. The World Bank's Forest Carbon Partnership Facility (FCPF) has been another important source of REDD+ funds and has approved 37 countries for readiness funding.

In addition to these funds, in 2011 the Green Climate Fund was adopted under the UNFCCC. Although the fund has yet to become operational, it aims to raise US\$100 billion per year by 2020 from both public and private sources and is intended to become the primary multilateral financing mechanism to support climate change adaptation and mitigation activities (including REDD+) in developing countries.

While funds have provided the largest support for REDD+ to date, some actors suggest the carbon market may be the most promising source of long-term REDD financing. Proponents of this approach estimate the market could generate as much as US\$50-120 billion of REDD funding per year over the long term.⁴³ The World Bank, which houses FCPF, has long envisioned REDD+ as a market-based strategy. In a 2007 press release, World Bank senior natural resources management specialist, Benoit Bosquet, an important figure in the development of FCPF, revealed that "The facility's ultimate goal is to jump-start a forest carbon market that tips the economic balance in favor of conserving forests."⁴⁴ However, as existing carbon markets have demonstrated, market-based financing could insert incredible volatility and risk in the REDD+ approach. Not only do different carbon trading schemes

⁴⁰ Grieg-Gran, 2006

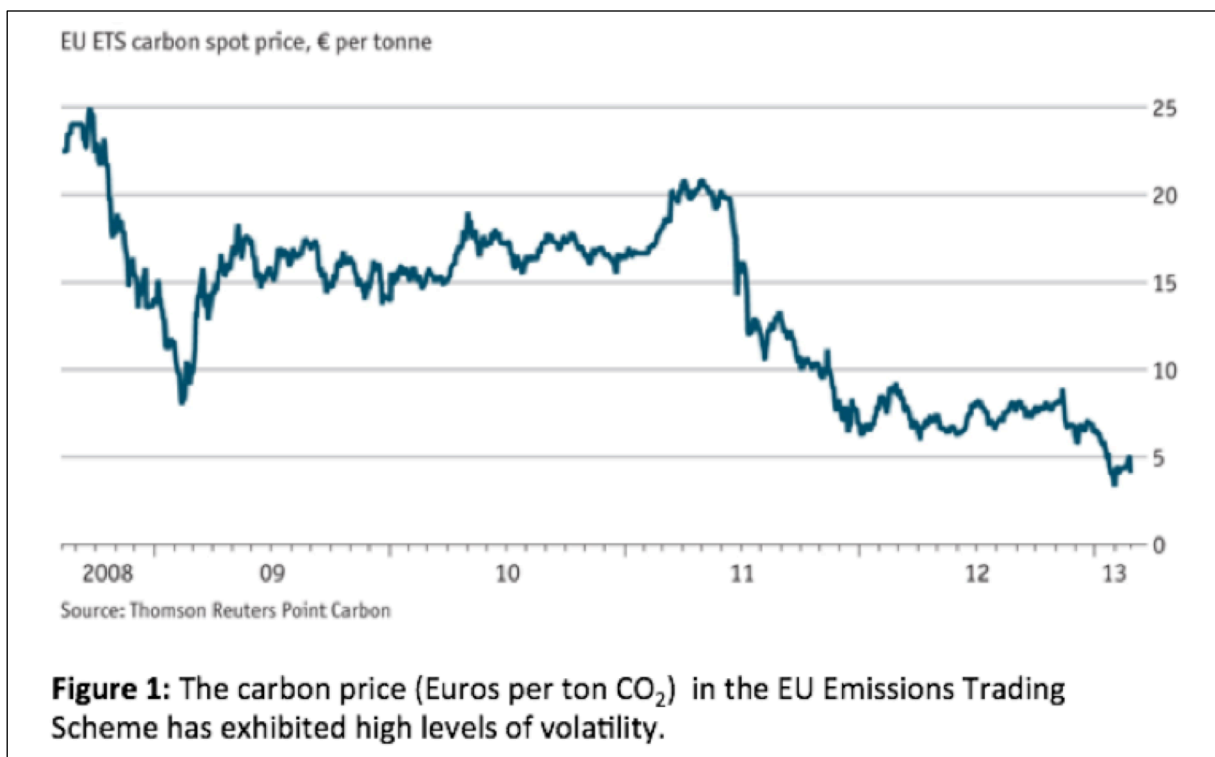
⁴¹ Voluntary REDD+ Database, 2014

⁴² Schalatek et al., 2012

⁴³ Corbera et al., 2010

⁴⁴ World Bank, 2007

produce substantially different prices for carbon⁴⁵, but the market is also subject to dramatic and unexpected fluctuations that can destabilize the long-term success of carbon sequestration activities as a mitigation strategy. In 2013, for example, the European Union's Emissions Trading Scheme (EU ETS) carbon price collapsed to its lowest price ever to 2.63 Euros/tCO₂e (US\$ 3.59), thereby drastically undermining faith in a market-based approach to carbon reductions (see Figure 1)⁴⁶. Based on these earlier market failures, we argue that leaving the fate of our climate to a volatile carbon market is too great a risk.



The carbon market is constituted by several compliance and voluntary markets, including the European Union's Emissions Trading Scheme (EU ETS), the Kyoto Protocol's Clean Development Mechanism (CDM) and Joint Implementation (JI)⁴⁷ mechanisms, and the voluntary carbon market. In 2013, the value of the carbon market was estimated at US\$53 billion dollars. The EU ETS is the largest carbon market and is dominated by emissions trading, although it does allow the use of some offsets through the CDM or JI markets. To date, carbon offsets from land use and forestry have not been included in the European carbon market and have played only a small role in the CDM (less than 1%) due to their high risks and transactions costs. For example, unresolved problems of carbon "leakage" mean that avoided deforestation activities may not produce verifiable emission reductions. Until these

⁴⁵ For example, the EU ETS average price in 2006 was US\$ 22.10 /tCO₂e vs. the CDM's Certified Emissions Reductions (CERs) average price of 10.90 US\$/tCO₂e in 2007 (World Bank 2007a, b in Corbera et al., 2010, p. 363)

⁴⁶ Lang, 2013c

⁴⁷ Joint Implementation refers to climate change mitigation activities or offsets implemented within industrialized countries, the credits of which are traded on the carbon market

issues are resolved, it is unlikely that REDD+ credits will be traded within the EU ETS or the CDM at any significant level.

Nevertheless, California's carbon market (the second largest market after the EU ETS) is likely to be a source of financing for REDD+. The sale of credits from sustainable forest management in Californian forests has begun and may support REDD+ projects internationally as early as 2015. Despite its volatility, the carbon market is still considered by many financial institutions to be a highly lucrative arena for financial gain. Much of this gain is derived not from direct sales of carbon credits, however, but through speculative activity. The growing number of carbon exchanges, as well as various banks and commodity exchanges, utilize derivatives and other speculative instruments to boost profits from carbon trades. One environmental consultancy has argued that by 2030 the carbon market will be the largest commodity market in the world – with a value as high as US\$2.5 trillion, equivalent to the current market for oil.⁴⁸ However, some question the effectiveness of such a market mechanism if financial gains are primarily associated with speculative activities.

While the carbon market has demonstrated an ability to generate revenue, albeit unevenly,⁴⁹ its effectiveness as a mechanism for reducing greenhouse gases, particularly in forests, remains uncertain. In accordance with market logic, the carbon market seeks the least expensive source of carbon available. Therefore, credits associated with weaker standards such as the Verified Carbon Standard (VCS) are likely to expand as they fail to consider the ecological and social co-benefits and are therefore able to offer cheaper carbon than those regulated by higher comprehensive standards.⁵⁰

Finance mechanisms such as levies and carbon taxes could be linked to existing markets or funds. Some countries have proposed a tax or levy on carbon credits associated with the Joint Implementation (JI) mechanism of the Kyoto Protocol, similar to the levy on Certified Emissions Reductions (CERs) in the CDM. According to Corbera et al.⁵¹ “a levy of this kind would depend on the existence of a sound long-term carbon market in order to produce a (to some extent) predictable flow of funds.” Other Parties have recommended a carbon tax on energy-intensive commodities in industrialized countries to fund REDD+ activities. Although carbon taxes have historically been considered politically unfeasible, International Monetary Fund (IMF) Managing Director, Christine Lagarde, has recently heralded the importance of implementing a carbon tax to accelerate emissions reduction and fund mitigation activities⁵².

Of these finance mechanisms, the carbon market continues to dominate in policy circles. Even the proposal for a carbon levy on JI or the EU ETS would require the existence of a robust carbon market. In addition, REDD+ Readiness carbon funds (e.g. World Bank FPCF) prepare developing countries for participation in possible future carbon markets. Some

⁴⁸ Sullivan, 2010

⁴⁹ Bumpus & Liverman, 2008

⁵⁰ Agrawal et al., 2011, p. 384

⁵¹ Corbera et al., 2010, p. 371

⁵² Volcovici, 2014

scholars⁵³ suggest that REDD+ Readiness funds should expand their focus beyond the establishment of carbon storage and monitoring capabilities to include the development of livelihood alternatives and governance mechanisms that foster greater forest conservation independent of long-term financing. While livelihood alternatives are critical in certain contexts, this argument can in some cases lay blame for deforestation at the hands of smallholders, thereby ignoring evidence that the greatest threats to forests are often not generated by forest dwellers themselves, but rather by insatiable and growing consumer demands for beef, agricultural commodities, and timber across the world.⁵⁴ In other words, any attempt to reduce emissions from deforestation and degradation must also find ways to address the root causes of these processes.

Due to the volatility of carbon markets, the uncertainty of emission reductions in forests, the consistent prioritization of market efficiency over local co-benefits, and the market's penchant for lowest-cost land use activities (which are invariably subsistence land uses), we argue that a carbon fund may provide a more effective and equitable mechanism to finance REDD+ programs. Drawing on the work of numerous scholars,⁵⁵ we recommend a carbon tax as the primary finance mechanism for a climate fund. The carbon tax need not be severely regressive if a portion of the tax revenue is returned to the public in order to offset the cost of compliance.

Governance of REDD+

The environmental governance of forests has been defined as “a set of social norms and political assumptions that will steer societies and organizations in a manner that shapes collective decisions about the use and management of forest resources.”⁵⁶ As the failure to develop a robust convention on forests at the Rio Earth Summit demonstrates, the governance of forests at the international level has long been a complex challenge. Researchers argue that REDD+'s approach to forest governance presents “a particular framing of the problem of climate change and its solutions that legitimizes certain tools, actors, and solutions while marginalizing others”.⁵⁷ Indeed, for REDD+ to function on a global scale requires not only that the rules and techniques for addressing the drivers of deforestation be aligned from the local to international level, but also that dramatically different value systems related to forests be reconciled. Forests hold socio-economic, cultural, and spiritual importance for many indigenous and forest-dependent communities. The approach to forest governance of these groups is often radically different than forest governance by state or corporate actors. Harmonizing forest governance at the national and subnational scales is fundamental to securing long-term financing for REDD+. Cross-scale forest governance has been one of the most complex challenges for REDD+ and remains one of the main priorities of REDD+ Readiness activities.

REDD+ is designed around a flow of incentive payments from the developed to the

⁵³ Lawlor et al., 2010

⁵⁴ Geist & Lambin, 2002; Hosonuma et al., 2012

⁵⁵ Andrew, 2008; Hsu & Bauman, 2012; Nordhaus, 2008

⁵⁶ Thompson et al., 2011, p. 100

⁵⁷ Thompson et al., 2011, p. 100

developing world conditional on proven emission reductions in forest ecosystems. As such, REDD+ involves a complex network of actors and policies at the local, regional, national, and international levels and includes an ever-expanding network of UNFCCC parties, governmental organizations, NGOs, indigenous peoples' organizations and civil society groups. REDD+ Readiness funding has been heavily focused on developing the institutional capacity, forest management policies, systematized land tenure, MRV mechanisms, legal enforcement, and benefit-sharing agreements necessary to produce a coherent REDD+ approach.

To date, no single agency or organization has complete control over the design and administration of REDD+ programs. As a result, REDD+ Readiness activities have been carried out in a piecemeal fashion, with different funds focusing on different aspects of REDD+. For example, while the UN-REDD program has concentrated more on the development of MRV strategies, the World Bank's FCPF has been more concerned with the establishment of economic incentives and tools.⁵⁸

REDD+ programs can be structured around a national, nested or jurisdictional⁵⁹ approach, with each presenting a different set of benefits and challenges. Many consider national governments as critical to the success of REDD+ and suggest that the national approach presents the greatest potential to effectively manage technical issues of leakage, permanence, and MRV.⁶⁰ Nonetheless, the emphasis on the national administration of forests has also led to some concerns regarding the recentralization of forest governance⁶¹ and the potential of state-led "green" land grabs for REDD+.⁶²

Measurement, Reporting and Verification (MRV)

Another important area of debate in REDD+ concerns techniques to measure, monitor, report, and verify not only the amount of carbon sequestered through avoided deforestation and forest enhancement activities, but also the co-benefits generated through REDD+ or what are also known as the "non-carbon" aspects of REDD+.

The 2010 Cancun Agreements call for a robust and transparent approach to monitoring, verifying, and reporting of REDD+ activities. The technical challenges such as measuring baselines, ensuring permanence and additionality, and preventing leakage were first raised during Kyoto negotiations and the failure to resolve them eventually led to the ineligibility of avoided deforestation in the Kyoto Protocol's CDM. To demonstrate that REDD+ payments are in fact producing emission reductions requires the establishment of a baseline calculation of what carbon emissions would have occurred in the absence of REDD+. The difference between expected carbon emissions from deforestation and what is achieved through REDD+ projects is referred to as "additionality."

⁵⁸ Thompson et al., 2011

⁵⁹ A nested or jurisdictional approach attempts to design programs that manage carbon across multiple scales of nations, states and provinces, and often involves changes in domestic policies (Nepstad et al. 2013).

⁶⁰ Phelps, Webb, & Agrawal, 2010

⁶¹ Pokorny et al., 2013

⁶² Di Gregorio et al., 2013

The emphasis on additionality has been a contentious issue as it raises the question of whether REDD+ should only award those who pose a present threat to forest conservation or whether it should also compensate forest users who have actively conserved forests over time. While some perceive the former as compensating the “criminals” and penalizing the good stewards, others view the latter as a source of “hot air” that does not necessarily generate additional emission reductions attributable to REDD+ programs. The hot air argument is of course only a problem in the context of carbon offsets meant to be traded for emissions elsewhere.

The establishment of a national baseline emission scenario is also deeply political and fraught with risks of error. For example, countries with lower deforestation rates for baseline years may receive lower REDD+ compensation than countries registering higher deforestation rates in the same years. Similarly, higher deforestation projections in certain countries may allocate excess emission allowances and produce another source of “hot air” (i.e. count emission reductions that may have occurred regardless of REDD+ due to, for example, diminishing returns on deforesting harder to access forest areas).⁶³

In order to sell carbon offsets, REDD+ requires technological innovations in remote sensing and land use monitoring with a high level of accuracy. Once baseline emission scenarios have been established, constant monitoring is required to ensure the permanence of carbon stores and verify that carbon sequestered in one area does not generate new emissions in other regions (leakage). For this reason, many REDD+ proponents advocate a national approach to REDD+ that can more effectively monitor carbon permanence. Nonetheless, while this REDD+ approach may account for leakage at a national level, it fails to monitor international leakage in non-REDD areas.⁶⁴ Many countries lack high-resolution maps of forest cover and the expertise for long-term monitoring. However, satellite imagery is becoming increasingly routine in countries like Brazil, India and Peru. LIDAR remote sensing and other technologies allow for greater monitoring of carbon from above and may even allow other sources of terrestrial carbon (e.g. soil) to be calculated in the future.⁶⁵

One of the results of UNFCCC negotiations on REDD+ and the insistence on more participatory involvement of stakeholders in all aspects of the REDD+ process has been the gradual development of participatory and community forest monitoring systems. Although no standardized monitoring approach exists, some researchers have designed simple approaches for forest monitoring and are devising methodologies that can incorporate indigenous and local peoples into this work.⁶⁶ Nonetheless, REDD+ programs based on carbon units require third party verification of carbon stores, thereby making the involvement of external institutions necessary in forest governance processes.

Indigenous peoples (IPs) have been actively involved in negotiating REDD+ and many

⁶³ Corbera et al., 2010

⁶⁴ Corbera et al., 2010

⁶⁵ Agrawal et al., 2011

⁶⁶ Danielsen et al., 2013

consider the implementation of participatory community monitoring and evaluation to be integral to its success. Some indigenous partnerships, such as the Indigenous Peoples' Partnership on Forests and Climate Change (IPPFCC), have secured funding sources to develop and compile indigenous perspectives on appropriate MRV practices. IPs have expressed concern that the emphasis on developing MRV mechanisms for carbon storage has reduced the attention given to developing other MRV techniques needed to ensure social, economic, and governance safeguards are being met. In general, IPs' perspective on MRV is much broader and more holistic than a narrow carbon-based focus, and includes indicators such as addressing co-benefits, land tenure, respect for human rights, gender, and the role of traditional knowledge in forest management.

Standards for Forest Carbon and Co-Benefits

Standards have been established to ensure quality and credibility of carbon offsets on the CDM and voluntary carbon markets. The majority of forestry-based carbon credits are exchanged through the unregulated voluntary market where standards play a particularly important role in relation to REDD+ not only in verifying emissions reductions but also by defining and assessing safeguards.⁶⁷

There are several private forest carbon standards that have already been or are likely to be applied to REDD. Verified Carbon Standard (VCS) is the most widely used in the voluntary carbon market, and in 2010 approved its first methodology for REDD+⁶⁸. However, VCS has failed to address social and environmental issues as it has been designed mainly for carbon accounting and verification⁶⁹. For this reason co-benefit standards have been developed to address social and environmental impacts of carbon projects. Co-benefit standards such as the Climate, Community and Biodiversity (CCB) Standard, Social Carbon, and Plan Vivo evaluate social and ecological dimensions such as participation, respect of local community rights (including UNDRIP in the case of CCB Standard), land tenure and equitable benefit sharing.

Multilateral funding programs of the World Bank FCPF and UN-REDD have also initiated their own standard and safeguard policies. The FCPF draws on a long history of safeguard policies implemented to mitigate undue social and environmental harm from World Bank funded development projects, thereby mitigating financial risk. While the Bank utilizes more of a risk-based approach intended to protect carbon investments, the UN-REDD Programme appears more committed to a rights-based approach, which prioritizes human rights over cost concerns. With regards to indigenous rights, UN-REDD is more closely aligned with the consent requirements under UNDRIP than is WB FCPF. However neither have a standardized system by which to measure social outcomes⁷⁰.

Like UN-REDD, the REDD+ Social and Environmental Standards (REDD+SES) draws heavily on a rights-based approach. The REDD+SES process is distinct from the above

⁶⁷ De La Fuente & Hajjar, 2013

⁶⁸ McDermott et al., 2012

⁶⁹ Agrawal et al., 2011; De La Fuente & Hajjar, 2013

⁷⁰ This paragraph drawn from McDermott et al., 2012

private certification and multilateral schemes, in that it involves a collaboration of non-governmental stakeholders together with national and subnational government representatives in a range of REDD+ countries. The REDD+ SES do not account for or monitor carbon. Instead, the process aims to develop standards that evaluate the non-carbon and co-benefit aspects of REDD+ performance at national and subnational levels, and to develop information systems to monitor and report on the implementation of safeguards. With regards to indigenous peoples, these standards monitor issues related to indigenous land and resource rights, benefit sharing, FPIC, livelihood security, conflict resolution, and compliance with local and national laws, as well as international treaties, conventions and agreements.⁷¹ While REDD+SES represent an important step toward the protection of indigenous rights under REDD+, some argue that these standards may not be sufficiently effective or applied⁷².

In general, numerous studies document the failure of existing co-benefit standards to effectively ensure FPIC, equitable benefit sharing, recognition of land and resource rights, or provide adequate income⁷³. In cases where land tenure was strengthened through the REDD+ process, carbon rights (i.e. the legal right to profit from sequestered carbon) were often absent.⁷⁴ Based on previous experiences with co-benefit standards, there is concern that the REDD+SES may be similarly insufficient in protecting the rights of indigenous peoples.

Land Tenure and REDD+

A critically important issue for indigenous peoples is how REDD+ will affect land tenure and access to forest resources. REDD+ has illuminated the lack of clear and formalized forest tenure in many developing countries. To date, it is uncertain how REDD+ will intersect with widespread land conflicts and disputes. This is a particularly important issue for indigenous peoples who, according to the World Bank, safeguard approximately 80% of the planet's biodiversity within their traditional territories, yet legally have title to less than 11% of these lands.⁷⁵ Indeed, the Indigenous Peoples' Partnership on Forests and Climate Change (IPPFCC) has stated that the failure of states to recognize indigenous peoples' territories and resources not only violates the most basic right of IPs, but also represents the "major source of conflicts between indigenous peoples and the state."⁷⁶ If carried out effectively, REDD+ could become an important vehicle for resolving pending land claims and attaining formal state recognition of indigenous peoples.

Proponents argue that prior to initiating REDD+, land tenure and carbon rights must be clarified and competing land use claims resolved. A recent evaluation by CIFOR of 23 subnational REDD+ initiatives in six countries found that unclear and unstable tenure rights and the disadvantageous economics of REDD+ are the two greatest challenges to advancing REDD+.⁷⁷ Not only are land tenure rights fundamental to ensuring clear responsibility over

⁷¹ De La Fuente & Hajjar, 2013

⁷² De La Fuente & Hajjar, 2013

⁷³ Visseren-Hamakers et al., 2012; Wallbott, 2014, Thompson et al. 2011

⁷⁴ Lawlor, Madeira, Blockhus, & Ganz, 2013)

⁷⁵ World Bank, 2014

⁷⁶ Riamit & Tauli-Corpuz, 2012, p. 13

⁷⁷ Sunderlin et al., 2014

forest protection, but they are also an integral component in determining who will receive and benefit from REDD+ incentives.⁷⁸ However, the process of clarifying tenure rights is deeply political and can result in illegitimate land grabs, the exclusion of informal forest users, and even accelerate land use change as formalized titles facilitate land sales.⁷⁹

How land rights and forest governance arrangements are clarified will not only have an impact on the relationships among forest users and government, but will also influence the extent to which forests are protected. Past research on forest governance indicates that local control of resources is often critical to their preservation. For example, in an analysis of 80 communally-managed forests, Chhatre and Agrawal⁸⁰ found that both higher carbon storage and greater livelihood benefits are associated not only with increased size of forest commons, but also with the degree of rule-making autonomy the community has over the forest. The authors found that government-owned forest commons were associated with a higher rate of over-harvesting. This study suggests that REDD+ is likely to produce better results both in terms of carbon storage and livelihood benefits if land ownership is in the hands of local communities and incentives are provided to encourage people to avoid over-harvesting the forest.⁸¹

Even in regions where forest ownership rights are established, the clarification of who owns the carbon sequestered within the forest is another area of contention. Property rights do not necessarily give the owner legal right to benefit from carbon sequestration. For example, some Tanzanian officials suggest that the entire nation should benefit from REDD payments, not just forest owners.⁸² Clarifying land and carbon rights therefore presents one of the most significant governance challenges for the successful and just implementation of REDD+.

Conclusion

In sum, REDD+ raises many of the same questions that have been encountered in other ‘sustainable development’ initiatives. Scholars insist that these issues must be adequately addressed within REDD+ in order to avoid repeating past failures.⁸³ Furthermore, interrogating the fundamental assumptions underlying REDD+ is useful for understanding the possibilities and limits for an alternative approach that is more sensitive to the needs articulated by indigenous peoples.

⁷⁸ Sunderlin et al., 2014

⁷⁹ Pokorny et al., 2013; Sunderlin et al., 2014

⁸⁰ Chhatre & Agrawal, 2009

⁸¹ Chhatre & Agrawal, 2009

⁸² Luttrell et al., 2013

⁸³ Pokorny et al., 2013; Savaresi, 2013

2. Key Assumptions of REDD+



There are several key assumptions associated with REDD+ that merit careful interrogation. These include issues associated with cost efficiency, drivers of deforestation, delivery of co-benefits, and tradeoffs between market efficiency and sustainable development. These will be discussed in some detail below, however, it is worth noting the more fundamental assumption behind REDD+. While non-carbon benefits and the social, ecological, cultural, and spiritual values of forest ecosystems are certainly acknowledged, decisions made at international meetings and actions taken by policymakers repeatedly prioritize the economic value of forests. This is likely to be exacerbated should the carbon market become the primary finance mechanism for REDD+. Understanding these assumptions is crucial as they guide policy and action on multiple scales. In this section we interrogate specific assumptions and discuss central concerns raised in existing literature.

Assumption 1: Cost Efficiency of REDD+

The development of REDD+ has been propelled by the assumption that carbon reductions from deforestation and degradation present a low-cost strategy for climate change abatement. According to the Stern Review, “Curbing deforestation is a highly cost-effective way of

reducing greenhouse gas emissions and has the potential to offer significant reductions fairly quickly”.⁸⁴ This is largely based on the presumption that with the exception of monitoring, avoided deforestation does not require the costly technology necessary for other mitigation options such as renewable energy infrastructure, alternative fuels, or large-scale geo-engineering projects. In addition, proponents assume that REDD+ payments can adequately compensate forest users for the opportunity costs of foregone land uses. However, the costs of REDD+ have proven difficult to estimate and can vary greatly depending on the local and regional contexts in which REDD programs are established.⁸⁵

Most evaluations of cost effectiveness are based on opportunity costs, which represent the monetary value of forgone land uses necessary to implement REDD+. Estimates often focus solely on the value of lost commercial activities required for REDD+, thereby ignoring both the non-market forest values important to many indigenous communities and the informal economic activities operating in forest regions.⁸⁶ By some estimates, carbon sequestration activities may be able to compete with the opportunity costs of many commercial activities, including high-value plantation crops or cattle-ranching.⁸⁷ However, the potential cost of carbon conservation varies tremendously across studies and hinges predominantly on how shifting commodity prices compare to fluctuating market prices for carbon. Increases in international prices for commodities such as timber, soy, beef, or gold affect people’s incentives to cut-down or preserve their forests.⁸⁸ For example, although the Brazilian Amazon reported significant reductions (> 40%) in deforestation rates in 2006, researchers attribute much of this to the diminishing returns on the conversion of forest to soy and cattle production during that time.⁸⁹ Increasing global demands for food, fiber, fodder, and fuel as the population increases and consumer tastes evolve, present a formidable challenge to REDD+’s ability to guarantee long-term protection of coveted forestlands over the long-term.

Furthermore, REDD+ has proven to be quite expensive when other costs beyond the opportunity costs are considered. The financial viability of any REDD+ approach must consider at least three principal costs: 1) forest governance and institutional arrangements; 2) measurement, reporting and verification (MRV); and 3) the opportunity costs of foregone forest use. In order to participate in REDD+, developing countries often have to dramatically reconfigure their approach to forest governance at multiple levels, including the establishment of new governing institutions and the formalization of land titles. According to Agrawal et al., contrary to expectations, the costs of the changes required to make forest governance “amenable to market-based mechanisms and/or intergovernmental transfers” in REDD pilot programs and other forest-based mitigation projects have been quite expensive⁹⁰. In addition, establishing baselines and monitoring forest changes for REDD+ requires costly technological expertise and innovations in remote sensing and carbon measurements.⁹¹

⁸⁴ Stern, 2007, p. 603

⁸⁵ Corbera et al., 2010

⁸⁶ Thompson et al., 2011

⁸⁷ Chomitz et al., 2006

⁸⁸ Rival, 2013

⁸⁹ Agrawal et al., 2011, p. 382

⁹⁰ Agrawal et al., 2011, p. 374

⁹¹ Pokorny et al., 2013

Overall, the costs of implementing REDD+ can be quite high and vary by scale, institutional capacity, monitoring requirements, the administration of payments, and the degree to which standards are followed and safeguards incorporated.

Assumption #2: REDD will have a significant impact on climate change through the reduction of deforestation and forest degradation

The second assumption suggests that REDD+ will have a significant impact on climate change through the reduction of deforestation and forest degradation. This might be a reasonable assumption if REDD operates outside of an offset market where emission reductions in forests are traded for continued emissions from industrial sectors in the Global North, technical issues (additionality, leakage, permanence) are resolved, and if it targets the main drivers of deforestation and forest degradation. However, these criteria remain uncertain.

Land use change has historically represented a significant portion of carbon emissions. Averaged over the last 150 years, land use change has been responsible for approximately 33% of carbon emissions.⁹² Throughout the 1980s and 1990s, this percentage hovered closer to 20% of total carbon emissions.⁹³ Although emissions from land use change have remained relatively stable over time, the rapid increase in fossil fuel emissions globally has lessened the relative contribution from deforestation and forest degradation. Between 2000 and 2010, total carbon emissions from land use change has been closer to 11%.⁹⁴ This has led some scholars to question the role of REDD+ in significantly mitigating the threat of climate change. Instead, they argue that REDD+ should be used solely as a temporary solution, and that the only permanent solution to climate change will be a permanent shift away from fossil fuel use.⁹⁵ In line with this perspective, indigenous peoples such as the Kichwa of the Sarayaku community in the Ecuadorian Amazon have called for leaving oil in the ground⁹⁶.

The drivers of deforestation vary across space and time. For example, between the 1960s and mid-1980s tropical deforestation in Latin America and Southeast Asia was driven largely by smallholder forest clearance enabled by state-led colonization schemes.⁹⁷ However, since 1985, deforestation drivers have shifted in importance from small farmers to market-driven deforestation, including large-scale land use change for agribusiness (e.g. cattle-ranching, soy production, and plantation agriculture),⁹⁸ infrastructure, and resource extraction (see Figure 2). The underlying causes for these shifts are often difficult to trace and are complexly linked to governance structures, land tenure systems, environmental policy, law enforcement, market fluctuations, cultural values of forests, indigenous and local community rights, and policies to address poverty and food security.⁹⁹ Since 2008, the UN-REDD program has

⁹² Houghton, 2012

⁹³ Houghton, 2012

⁹⁴ Houghton, 2012

⁹⁵ Houghton, 2012

⁹⁶ Amazon Watch, 2014

⁹⁷ Rudel et al., 2009

⁹⁸ Rudel et al., 2009

⁹⁹ Thompson et al., 2011

acknowledged the complexity of deforestation drivers and the need to adopt strategies that attend to the specific challenges of each country and region. Furthermore, addressing the root causes of deforestation and degradation often requires a substantial reconfiguration of governance structures, institutions, and capacities that are deeply political, time-consuming and costly to establish.¹⁰⁰

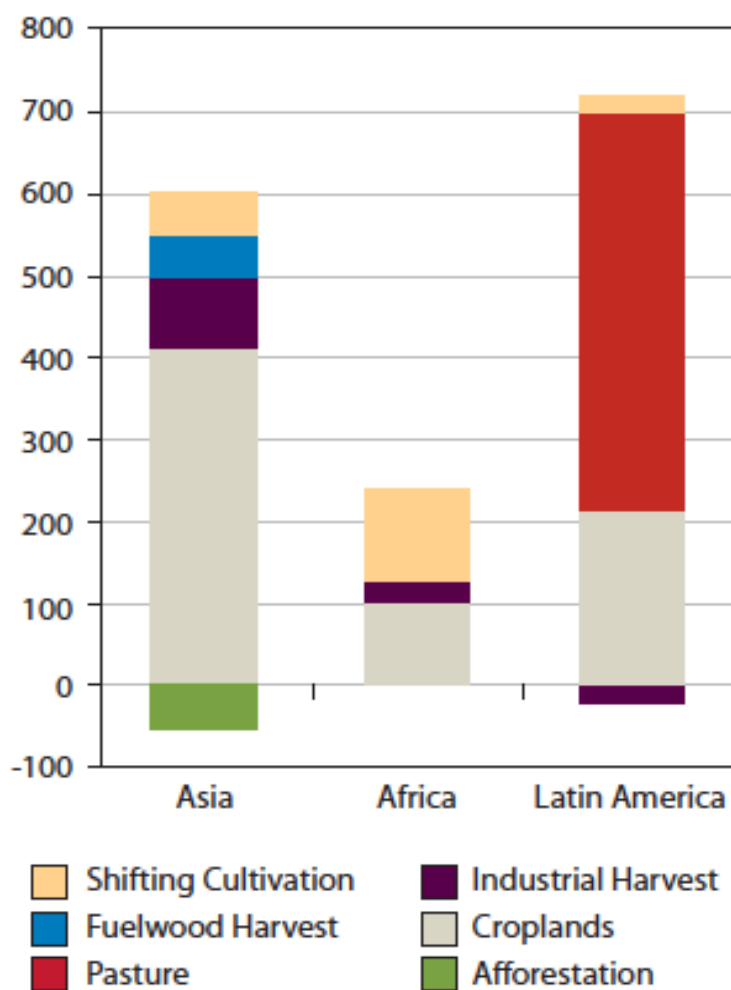


Figure 2: Sources of carbon emissions from deforestation and degradation in tropical forests of Asia, Africa and Latin America. While the source of carbon emissions vary by region, “Croplands”, which includes industrial agriculture, and cattle ranching are significant and in most geographic contexts, greater than emission from shifting cultivation often used for subsistence. Units are in billion tons of carbon per year. Source: Houghton 2010

¹⁰⁰ Corbera et al., 2010

Despite the complexity of deforestation and its multiple drivers, REDD+ has typically focused on the land-use practices of small-scale actors instead of large-scale economic drivers such as commercial land uses for soy and cattle. The world's most intact tropical forests are maintained either by the state as protected areas or by forest-dependent and indigenous communities. Because avoiding deforestation is considered among the lowest cost mitigation options, these communities have become prime sites for mitigation. However, as argued, the drivers of tropical deforestation are complex, vary by geographical context, and are influenced by both proximate and underlying factors.¹⁰¹ Agriculture and the expansion of the agricultural frontier represent the leading proximate causes of land use change associated with deforestation.¹⁰² These activities include permanent and large-scale agriculture, cattle ranching, and shifting cultivation. The fundamental or underlying causes however are not population driven, but in fact economic¹⁰³. This means that commercial land uses such as permanent agriculture, cattle ranching and timber production are more significant contributors to deforestation than subsistence land uses. In a study of 46 tropical and sub-tropical countries, Hosonuma et al. found that commercial agriculture represents the largest driver of deforestation (40%) and timber extraction the largest driver of forest degradation (52%).¹⁰⁴ According to Geist and Lambin, "Contrary to widely held views, case study evidence suggests that shifting cultivation is not the primary cause of deforestation."¹⁰⁵ This observation has lead scholars to advocate for policy changes that target the main drivers of deforestation in places like the Amazon, such as the commercial demand for soy and cattle.¹⁰⁶ Proposals for a national or jurisdictional REDD aims to intervene at the policy level across nations, states or provinces to address fundamental market drivers of deforestation such as agricultural expansion¹⁰⁷.

Assumption #3: REDD can achieve market efficiency as well as sustainable development and local co-benefits

The third assumption suggests that REDD can meet financial, political and social goals by achieving market efficiency as well as sustainable development and local co-benefits. However, scholars have identified that fundamental tradeoffs exist between market efficiency and sustainable development, and that the former (market efficiency) is consistently prioritized.¹⁰⁸

Sustainable development, livelihood benefits, biodiversity conservation, and watershed protection are some of the social and ecological co-benefits REDD+ is expected to produce. The World Bank suggests that the inclusion of co-benefits generated through REDD+ can be instrumental in advancing REDD+ in situations in which the price of carbon is less than the

¹⁰¹ Geist & Lambin, 2002

¹⁰² Corbera et al., 2010; Geist & Lambin, 2002; Houghton, 2012

¹⁰³ Geist & Lambin, 2002

¹⁰⁴ Hosonuma et al., 2012

¹⁰⁵ Geist & Lambin, 2002, p. 146

¹⁰⁶ Nepstad et al., 2009

¹⁰⁷ Nepstad et al., 2013

¹⁰⁸ Olsen, 2007

opportunity cost of preserving forests.¹⁰⁹ While the World Bank is optimistic about the range of benefits that could accrue to a variety of actors over the short- and long-term, many forest-dependent groups have expressed concerns about the distribution of those benefits and the potentially perverse incentives and trade-offs they entail. For example in the Brazilian Amazon, large landowners were historically responsible for nearly 80% of deforestation. If REDD+ projects require strict additionality, these landowners would receive the greatest compensations from REDD+¹¹⁰. Alternatively, farmers practicing swidden agriculture on small plots may be required to constrain their livelihood practices while receiving lower REDD+ payments.

Although the mechanisms for distributing and measuring the co-benefits produced by REDD+ are still being developed, key lessons can be gleaned from past approaches to sustainable development and forest conservation. Studies demonstrate the importance not only of how conservation incentives are structured and priced, but also how sustainable development programs intersect with and address local issues of land tenure, employment, informal or illegal economic activities, participatory decision-making, technical capacity, and power differentials among people of different ages, genders, ethnicities, and/or classes.¹¹¹

In a review of past approaches to sustainable and pro-poor development projects, Pokorny et al. conclude that some programs have been able to generate important income alternatives, managerial capacity among smallholders, and beneficial new partnerships.¹¹² Nonetheless, the authors also observe a variety of inequalities in benefit sharing and access. Smallholders are often at a competitive disadvantage compared to private companies with greater administrative and organizational skills to access incentive programs; some program norms conflict with local livelihood practices (e.g. hunting, agriculture); resulting profits are often marginal compared to other options; smallholders frequently lack sufficient capital to continue operations after the program's initial set-up; and program structures engender reliance on national and international markets, as well as mediation by external NGOs.¹¹³

Other studies of conservation and sustainable development in forested areas raise important questions regarding the tension between respecting the autonomy and decision-making processes of indigenous communities and ensuring equitable distribution of program benefits. Although conservation projects may impact the resource access and livelihoods of all community members, unequal power relations frequently influence how program benefits are distributed. Research demonstrates that women, youth, and other forest users who lack voting power in forest governance decisions are often less-informed about program terms and are frequently excluded from program benefits while being expected to sacrifice more in terms of forest access and land use.¹¹⁴ For example, in a study of the Socio Bosque Conservation program in Ecuador, Krause et al. found that financial benefits were unevenly distributed,

¹⁰⁹ Minang & White, 2010

¹¹⁰ Börner et al., 2010; Thompson et al., 2011

¹¹¹ Pokorny et al., 2013; Scriven, 2012; Sundberg, 2004

¹¹² Pokorny et al., 2013

¹¹³ Pokorny et al., 2013

¹¹⁴ Gurung & Quesada, 2009; Krause et al., 2013; Corbera et al. 2007

many community members lacked a thorough understanding of project terms and management, non-voting youth were among the most affected and least compensated, and nearly half of the study's respondents report more conflict in the community since the program was initiated, leading to accusations of leadership corruption and program mismanagement.¹¹⁵

Some of the conflicts observed in conservation programs such as the Socio Bosque program result from reconfigurations in forest governance (e.g. establishing conservation areas in forest commons) while leaving inequities intact (e.g. the exclusion of women and youth from decision-making processes). There are no easy solutions in this regard. As Krause et al. explain, "Interfering with communal decision-making involves a trade-off between respecting communal autonomy and internal decision-making processes on one hand, and the imposition of terms and processes to achieve full and effective participation of community members on the other."¹¹⁶

The notion of tradeoffs has figured prominently in discussions of REDD+ (particularly if financed through the carbon market) and raises many of the same concerns that have been observed regarding the CDM. In a comprehensive literature review of almost 200 studies evaluating sustainable development across a broad range of CDM projects, Olsen found that within a market mechanism, tradeoffs exist between sustainable development and economic efficiency, and that the latter was consistently prioritized.¹¹⁷ Institutional analyses of carbon forestry have recognized that while tradeoffs exist between market efficiency and local sustainable development, local benefits are more likely to be generated in areas with clear land rights and under common property management.¹¹⁸ However, based on empirical studies of carbon forestry projects operating within systems of common property management in Mexico, some scholars have found shortcomings in the carbon projects' delivery of social and environmental benefits at the local scale.¹¹⁹ In other words, markets have negatively affected the governance and management often observed in forest commons.¹²⁰ As the United Nations, World Bank, and governments at various scales grapple with appropriate finance mechanisms for REDD+ in forest communities, it is important to recognize the ways in which carbon markets can weaken the institutional social controls communities use to manage the commons, thereby compromising the local benefits often found within collective action arrangements.¹²¹

¹¹⁵ Krause et al., 2013

¹¹⁶ Krause et al., 2013

¹¹⁷ Olsen, 2007

¹¹⁸ Chhatre & Agrawal, 2009; Smith & Scherr, 2003

¹¹⁹ Brown & Corbera, 2003; Nelson & de Jong, 2003; Osborne, 2011

¹²⁰ Agrawal et al., 2011; Osborne, *in review*

¹²¹ Osborne, *in review*

3. Indigenous Concerns



Whether inhabiting arctic, arid, coastal or forest areas, indigenous peoples (IPs) are among the populations most affected by climate change. Many IPs live in sensitive ecological zones that are inextricably linked to their socioeconomic, cultural and spiritual lives. Forest-dependent communities are doubly affected by climate change, not only experiencing the direct impacts of human-induced climate shifts, but also increasingly becoming the target of climate mitigation policies and programs. Forests are particularly susceptible to climate change and have been affected by extreme weather events such as drought conditions, which can exacerbate forest fires, destroy large areas of rainforest and release carbon emissions. Combined with increasing deforestation from logging, cattle ranching, and agricultural expansion, these processes create a vicious feedback loop of deforestation and climate change, which some scholars argue have compromised forest resilience and led to unprecedented species extinction.¹²² As these processes will have tremendous social and ecological impacts, many indigenous peoples strongly support measures to reduce deforestation and climate change. While indigenous peoples represent a diverse community and have articulated various positions on REDD,¹²³ there is widespread agreement among IPs that effective and immediate strategies are required to reverse climate change and deforestation.

¹²² Malhi et al., 2008; Thomas et al., 2004

¹²³ Wallbott, 2014

As indigenous areas are among the most forested and biodiverse,¹²⁴ scholars and policy makers agree that indigenous peoples represent key stakeholders in the development and expansion of conservation-based activities under REDD+. Recognizing the potential impacts of REDD on their communities and livelihoods, IPs have become highly visible actors in the REDD+ process and have sought to influence policies pertaining to safeguards, sovereignty, financing and the clarification of land rights.¹²⁵ There is a certain irony, however, that the communities with relatively low carbon footprints are being enrolled in strategies to solve a problem largely driven by fossil fuel combustion elsewhere.

As previously mentioned, some scholars argue that, if successfully implemented, REDD+ can reduce deforestation and restore degraded areas in a cost-effective manner that also ideally generates social and ecological co-benefits.¹²⁶ However, REDD+ pilot projects, Payments for Ecosystem Services (PES), and carbon forestry projects, to date, have shown mixed results in practice. The possible risks and concerns associated with REDD+ are in some ways similar to those found in integrated conservation and development programs (ICDPs), which emerged in the early 1980s and aimed to also simultaneously provide global public benefits as well as sustainable local development.¹²⁷ One of the main concerns about REDD+ is exclusion from forests and/or restrictions on resource access, which some groups experienced in the wake of conservation and even ICDPs. This issue is of particular concern in contexts where indigenous peoples lack formal land rights or land tenure is unclear. In areas where land rights are disputed, REDD+ may facilitate progress in securing indigenous land rights or result in (re)centralized control of forests at the expense of indigenous communities.¹²⁸ In many cases, REDD+ pilot projects have been inserted into communities with a high degree of land tenure insecurity.¹²⁹ To date, efforts to clarify tenure through REDD+ have been minimally effective, locally-based and/or piecemeal. Due to the politically charged nature of national land reform and the time and resources required to negotiate contentious tenure disputes, comprehensive tenure clarification is unlikely to happen before REDD+ projects are initiated. Land rights, therefore, represents an area of significant concern for IPs, civil society, and researchers involved in REDD+.¹³⁰

The form of land tenure, whether individual titles, communal land tenure, or indigenous territory, clearly matters. While the clarification of territorial rights can be instrumental to protecting indigenous peoples' sovereign rights and help resolve competing land use claims, property titles can also accelerate land use change as land values and property sales increase.¹³¹ In addition, informal forest users and/or non-voting community members can often become marginalized in the tenure process as rights are clarified for others.¹³²

¹²⁴ Nelson & Chomitz, 2011

¹²⁵ Thompson et al., 2011; Wallbott, 2014

¹²⁶ Alexander et al., 2011

¹²⁷ Brandon & Wells, 1992

¹²⁸ Visseren-Hamakers et al., 2012

¹²⁹ Sunderlin et al., 2014

¹³⁰ Sunderlin et al., 2014

¹³¹ Osborne, 2013; Pokorny et al., 2013

¹³² Sunderlin et al., 2014

The form and distribution of REDD+ benefits is another area of significant interest to indigenous and forest-dependent peoples. Based on experience with sustainable and pro-poor development projects in the Amazon, Pokorny et al. conclude that “[t]he great majority of Amazonian forestry development projects ...had surprisingly few lasting positive effects on the local situation.”¹³³ They found that while managerial capacity was enhanced among smallholders, financial benefits were marginal, uneven, and often low in comparison to other land use options. The financial failing of such projects is the result of several factors: 1) Smallholders often have a competitive disadvantage compared to private companies in terms of administrative/organizational skills and access to resource inputs; 2) Smallholders frequently lack sufficient capital to continue operations after initial program establishment; and 3) Reliance on national/international sales require constant NGO mediation, which further reduces financial benefits to communities.¹³⁴ More broadly, this failure can be explained by the insertion of projects into an already existing political economic context of unequal social relations. Therefore, the project outcomes tend to favor particular actors over others. There are concerns that REDD+ may result in similarly uneven benefit sharing as found in earlier sustainable development projects.

Establishing effective safeguards to reduce or eliminate potential negative impacts of REDD+ is another area of interest for many indigenous peoples. Indigenous peoples’ representatives and vocally active groups have played important roles in influencing debates on issues such as the inclusion of safeguards and respect for the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in REDD+ policies.¹³⁵ Core safeguards under the UN-REDD Programme include local stakeholder participation, *Free, Prior and Informed Consent* (FPIC), transparency, respect for the knowledge and rights of indigenous peoples, conservation of biodiverse forests, and protection against leakage. While these safeguards are comprehensive in scope, they lack specificity and legal authority and are often framed in some of the weakest language in international law.¹³⁶ In the UN-REDD text, national governments are given the ultimate authority to design country-led safeguards, which may be weak and/or unenforced, ultimately proving unsatisfactory to indigenous communities.¹³⁷ Furthermore, while UNDRIP certainly represents an important milestone for indigenous peoples and has been included under UN-REDD safeguards, UNDRIP is not legally binding and may ultimately lack the necessary force to protect the rights of indigenous peoples.

Meaningful participation in climate change negotiations is another key issue for indigenous peoples. Many indigenous peoples agree that to date international treaties have been insufficient for solving the climate change problem and they link that failure to the lack of meaningful inclusion of indigenous peoples in negotiations.¹³⁸ A similar argument was made in 1989 by COICA¹³⁹ to explain the failure of conservation in the Amazon.¹⁴⁰ Although the

¹³³ Pokorny et al., 2013

¹³⁴ Pokorny et al., 2013

¹³⁵ Wallbott, 2014

¹³⁶ Visseren-Hamakers et al., 2012; Wallbott, 2014

¹³⁷ Lemaitre, 2011

¹³⁸ Tauli-Corpuz & Lynge, 2008

¹³⁹ Coordinator of Indigenous Organizations of the Amazon River Basin (*Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica*).

participation of local communities has been highlighted by the international community and has received considerable attention in climate negotiations on REDD+ policies, meaningful local participation in the design and implementation of REDD+ has been negligible.¹⁴¹ For example, the highly technical nature of REDD+ has limited the participation of indigenous peoples to minimal data collection and monitoring. Nevertheless, while indigenous peoples' involvement in decision-making around REDD+ has been circumscribed, IPs are increasingly participating in international negotiations as a strategy to influence the process.

In international arenas, indigenous peoples participate in a variety of ways. The World Bank's FCPF program involves indigenous peoples in capacity-building activities associated with REDD+ Readiness.¹⁴² The Bank has also held dialogues and workshops with indigenous peoples to share information and field questions about FCPF and the possible role for indigenous communities. The UN process involves indigenous peoples in more substantive ways, mainly through their participation on the UN-REDD Programme Policy Board¹⁴³ and as observers. However, participation on the Policy Board is limited to one indigenous leader, and observers are chosen from a selected number of indigenous groups facilitated by UN-REDD. The newly appointed Special Rapporteur of Indigenous Peoples, Victoria Tauli-Corpuz, has been highly active in promoting indigenous rights within UN-REDD. Some argue that this type of alignment with the UN process risks legitimizing global policies that may further marginalize indigenous groups.¹⁴⁴ However, others argue that participation in the process represents an important way to influence the direction and scope of REDD+, and ensure indigenous rights are respected and secured.¹⁴⁵

The practices and traditional ecological knowledge of indigenous peoples may also provide guidance on REDD+, not simply as a mitigation and adaptation strategy, but also as an approach to long-term sustainable land-use planning. Traditional ecological knowledge is defined as “a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment”.¹⁴⁶ This relationship between humans and nature is captured by the concept *Buen Vivir* (literally ‘good living’ in Spanish). This term from South America draws in large part on the cosmovision of indigenous peoples and offers an alternative approach to top-down and market-driven forms of development. *Buen Vivir* embodies a dynamic and locally based model. It indicates that the one-size-fits-all model typical of REDD-Readiness is likely to fail to support the diversity of indigenous knowledge systems present in different forest communities. According to Tauli-Corpuz and Lynge, “As stewards and custodians of the

¹⁴⁰ Chapin, 2004

¹⁴¹ Danielsen et al., 2013

¹⁴² Thompson et al., 2011

¹⁴³ “The UN-REDD Programme Policy Board is made up of representatives from partner countries, donors to the Multi-Partner Trust Fund, civil society, Indigenous Peoples and the three Participating UN Organizations (FAO, UNDP and UNEP). The Policy Board's role is to approve financial allocations and give strategic direction to ensure the overall success of the Programme.” (“The UN-REDD Programme Policy Board,” 2014)

¹⁴⁴ Thompson et al., 2011

¹⁴⁵ Tauli-Corpuz & Lynge, 2008

¹⁴⁶ Berkes, 2012, p. 7

world's biodiversity, cultural diversity, and traditional ecological knowledge, indigenous peoples can contribute meaningfully to the design and implementation of more appropriate and sustainable mitigation and adaptation measures".¹⁴⁷ Due to their relatively low carbon footprint, the land use practices of indigenous peoples represent important models for climate change mitigation. Even despite ongoing struggles against deforestation, mining, fossil fuel extraction, and large-scale agricultural plantations, IPs have been successful in maintaining carbon stores in trees and in the ground.¹⁴⁸

Finally, many indigenous peoples have challenged the commodification of nature through carbon markets. The ongoing struggles around REDD+ illuminate a fundamental difference in worldviews between market-based and indigenous perspectives on climate change and sustainability.¹⁴⁹ A market-based view prioritizes cost-effective strategies and the commodification of ecological services, thereby utilizing the same economic tools and capitalist logic that arguably have been the underlying source of the climate change problem. In contrast, an indigenous, bio-cultural and ecosystems approach emphasizes respect for human rights and the generation of non-carbon benefits over cost concerns. Thus far, mainstream and dominant approaches to REDD+ have been more aligned with a market-based approach and REDD+ financing is likely to continue in this vein. Solutions derived from the commodification of nature have largely failed to produce desired benefits across scales and in many cases have generated negative social and ecological impacts, as demonstrated by numerous empirical studies of PES, carbon forestry, and earlier ICDPs¹⁵⁰. The failure of many of these projects based on the market logic of 'selling nature to save it'¹⁵¹ suggests that we need to consider radically different approaches if we are to effectively and equitably tackle the climate change problem. The concept of *Buen Vivir* offers an important perspective for imagining and creating a new vision for development driven not by capital accumulation but by a deep understanding of the interrelationships between humans and nature.

¹⁴⁷ Tauli-Corpuz & Lynge, 2008, p. 20

¹⁴⁸ Tauli-Corpuz & Lynge, 2008; Amazon Watch 2014

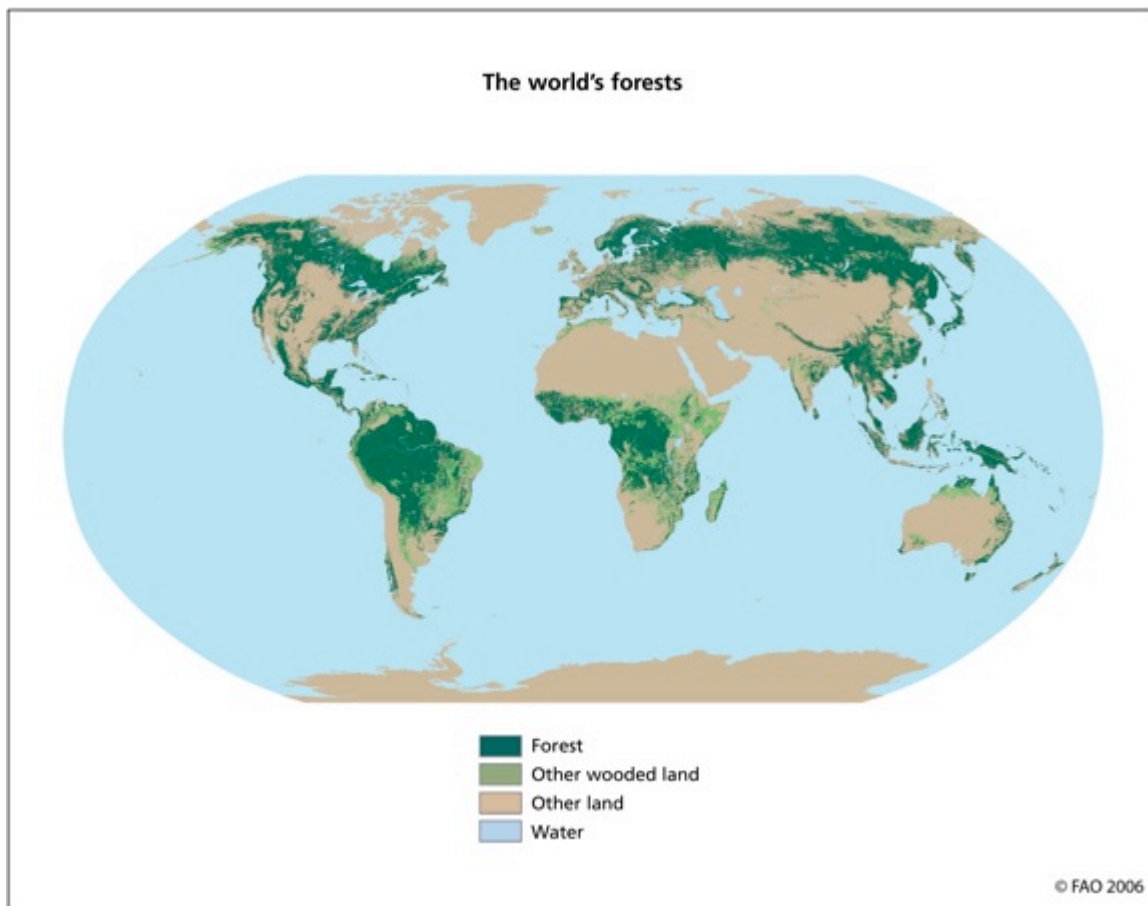
¹⁴⁹ Visseren-Hamakers et al., 2012

¹⁵⁰ Brandon & Wells, 1992; Brown and Corbera 2003; Krause & Loft 2013; McAfee and Shapiro 2010; Osborne 2013

¹⁵¹ McAfee, 1999

4. Country Profiles

In the next section, we provide seven case study profiles of countries involved in various stages of REDD+. They include the countries of Mexico, Indonesia, Guyana, Peru, Ecuador, Tanzania, and Brazil. Each represents a different historical and geographic context of indigenous people's relationship to REDD+. In each case, we provide the country background with respect to REDD+, challenges to implementation, and issues of particular relevance to indigenous communities.



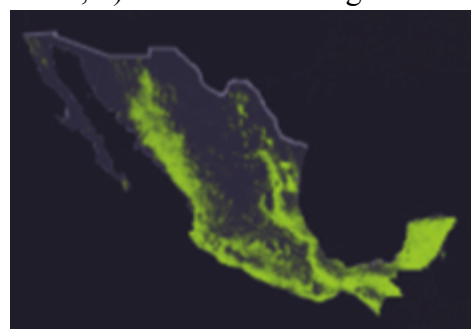
MEXICO



Country Background

Mexico is among the top five most biologically “mega-diverse” countries and is home to the highest number of pine and oak species in the world.¹⁵² It boasts a combination of temperate and tropical forests covering nearly a third of the nation’s territory. Rural agrarian communities and indigenous groups own 70% of Mexico’s forested area.¹⁵³ Mexico averaged a 0.24% deforestation rate between 2005-2010 (0.13% in primary forest).¹⁵⁴ The main causes of deforestation include: 1) conversion of forestland to pasture; 2) slash-and-burn agriculture; 3) illegal logging; and 4) natural disturbances.¹⁵⁵

Between 2003-2011, the National Forestry Commission (CONAFOR¹⁵⁶) implemented 5,085 projects for Payment for Ecosystem Services (PES). Mexico is also home to a growing number of forestry-based carbon offset projects largely servicing the voluntary carbon market. Mexico’s experience with PES programs, carbon offset projects, as well as community forest management has been applauded by the World Bank and facilitated Mexico’s admittance to the FCPF for REDD+.



Mexico’s National REDD+ Strategy is still being formed. Mexico has taken a territorial approach to REDD+ that is not yet consolidated under one program or policy. According to Mexico’s REDD+ Vision and Readiness Preparation Proposal (R-PP), all REDD+ activities

¹⁵² Convention on Biological Diversity, 2013

¹⁵³ FAO, 2010

¹⁵⁴ FAO, 2010

¹⁵⁵ World Bank FPCF, 2010

¹⁵⁶ Comisión Nacional Forestal

must have national, regional, and local consultation processes. Various REDD+ programs are emerging at the state and project level in Mexico. The state of Chiapas, for example, has a Memorandum of Understanding (MoU) with the state of California (USA) to develop and implement REDD+ projects. In the future, these projects will be used to generate offsets for sale on California's carbon market in an effort to meet the state's targets for emission reductions. In addition, REDD+ Early Action includes pilot programs in the Mexican states of Campeche, Chiapas, Jalisco, Quintana Roo, and Yucatan. These programs attempt to increase sustainable forest management and reduce deforestation. The activities are designed through participatory processes with communities and have a five-year investment plan detailing benefit-sharing arrangements.

Mexico's National REDD+ Strategy identifies forest owners as the legal owners of the carbon contained therein and the Law for Sustainable Forest Development establishes that forest owners must be adequately compensated. Nonetheless, there is still a debate regarding whether payments should be processed through the national government or made as direct carbon payments to property owners themselves.

For MRV, Mexico envisions developing an integrated data set that combines multi-scale information from project, sub-national, and national levels. It proposes to combine remote sensing and ground-based forest inventories, and to seek opportunities for involving communities in monitoring activities.

Mexico has taken significant action on REDD+ since COP13 in Bali. In a submission to the SBSTA¹⁵⁷, the Mexican government emphasized the importance for FPIC, capacity building, land tenure, and the role of communities in measuring and monitoring carbon projects¹⁵⁸. Furthermore, President Calderon signed a bill in 2012, a key element of which was a climate change fund that would, in part, support REDD+ activities. While project implementers have attempted to include indigenous and forest-dependent peoples in projects that might be considered precursors to REDD+ (PES, carbon offsets, community forest management), there have been formidable challenges at multiple scales.

REDD+ Challenges

State- and local-level REDD+ initiatives are developing quickly in Mexico and there are concerns regarding how these programs will be harmonized under one National REDD+ Strategy. Mexico still lacks a robust definition of forests in its legal framework, causing concerns that questionable practices such as monocultures and tree plantations will be included within REDD+. The methods for measuring and ensuring social and environmental safeguards are also still pending.

In an evaluation of Mexico's PES programs, McAfee and Shapiro found that these programs did not address the drivers of ecological degradation or the inequities and unresolved problems of land tenure, resource rights, and local development goals.¹⁵⁹ These are all critical factors for the success of both PES and REDD+. In 2013, a group of farmer and human rights organizations in Chiapas signed a letter rejecting REDD+. Their rejection was based on local experiences during the initial voluntary phase of REDD+ in Chiapas.

¹⁵⁷ Subsidiary Body for Scientific and Technological Advice (SBSTA).

¹⁵⁸ Skutsch et al. 2013

¹⁵⁹ McAfee & Shapiro, 2010

They observed that REDD+ in Chiapas fails to include and inform indigenous peoples; includes pine and African Oil palm plantations as “forests”; criminalizes peasant farming systems; contributes to the loss of agricultural biodiversity; divides communities; and leads to evictions of indigenous people and farmers.¹⁶⁰

REDD+ and Indigenous Peoples

While REDD+ is still fairly new in Mexico and little scholarship exists regarding the impact of REDD+ on indigenous communities, various reports and letters draw attention to concerning trends, including a lack of transparency, forced relocation of forest residents, and the limitations placed on livelihood activities within REDD+ project areas. Existing literature on PES and carbon forestry in Mexico indicates that many of these issues are not new, but rather represent permanent features within Mexico’s complex history with sustainable development.¹⁶¹

In El Triunfo Biosphere Reserve in Chiapas, for example, highland farmers reported receiving government subsidies for two years in exchange for reforesting half of their lands and restricting household food production. After two years, the subsidies were suspended and the community was told they lived in a hazardous area and would be relocated to a Sustainable Rural City constructed by the state¹⁶². Marotta and Coute-Marotta note the irony that the government has moved the community in order to secure more carbon payments, but had to clear-cut a section of forest in order to establish the Sustainable Rural City for evicted residents¹⁶³.

Other studies report conflicts generated by REDD+ within and between forest communities. In some cases, payments and other benefits have been distributed unevenly. Some community members have been given weapons and training to enforce the protection of the forests. In Natural Protected Areas targeted for REDD+ programs, such as the Montes Azules Biosphere Reserve in Chiapas, the government has increased its efforts to evict populations located within these areas.¹⁶⁴ If residents refuse to relocate, the government has resorted to cutting off medical services and emergency transport to these areas in order to pressure communities to leave.¹⁶⁵ Although literature is still limited on REDD+ in Mexico, the impacts observed already in areas in the early stages of REDD+ pilot projects draw attention to the unpredictable and uneven nature of project benefits, and expose worrisome practices of state coercion and even violence in implementing REDD+ programs.

REDD+ in Mexico

- 11 REDD+ projects; 38 REDD-Readiness Initiatives
- World Bank FCPF Country
- UN-REDD Partner Country

¹⁶⁰ Lang, 2013h; Conant, 2011

¹⁶¹ Brown & Corbera, 2003; McAfee & Shapiro, 2010; Osborne, 2011

¹⁶² Marotta & Coute-Marotta, 2012

¹⁶³ Marotta & Coute-Marotta, 2012

¹⁶⁴ Lang, 2011a; Langelles, 2011

¹⁶⁵ Langelles, 2011

- In 2010, a Memorandum of Understanding was signed between the governors Chiapas, Mexico and California to facilitate an offset program for REDD+ in Mexico that would link to California's carbon market.
- The Mexican states of Chiapas, Campeche, Jalisco, Quintana Roo and Tabasco are members of the Governors' Climate & Forests Task Force (GCF)
- Mexico has a National REDD+ Strategy. It officially supports REDD+ under UNFCCC and encourages community-based forest management for REDD+ implementation. In addition, it supports both public and private market-based financing for implementation, as well as subnational implementation in the interim.
- Mexico is beginning to use REDD+SES.

Key REDD+ Actors

- The Secretary of Environment and Natural Resources (SEMARNAT¹⁶⁶) is a coordinating agency for REDD+ activities.
- Mexico's National Forestry Commission (CONAFOR¹⁶⁷) has been leading the country's National REDD+ Strategy.
- The REDD+ Working Group is a multi-stakeholder technical advisory committee
- Various NGOs and civil society groups

REDD+ Funding

- Through the FCPF, the World Bank has pledged US\$3.8 million to Mexico's REDD-Readiness activities.
- Norway has provided Phase 1 support to Mexico to identify target areas for REDD pilot projects under the FCPF. Norway has also signed a MoU with Mexico to develop its Reference Scenario.
- Mexico has also been selected as a pilot country for The World Bank's Forest Investment Program (FIP). As projects are FIP approved, Mexico could soon accept funds from this program
- The R-PP requires some activities be co-financed by the government and other sources. Mexico's General Law on Climate Change establishes a climate change fund, which includes funds for REDD+.

¹⁶⁶ Secretaría del Medio Ambiente y Recursos Naturales

¹⁶⁷ Comisión Nacional Forestal

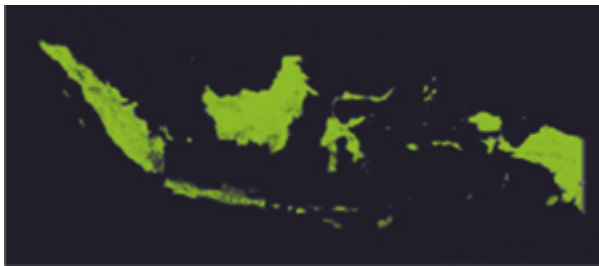
INDONESIA



Country Background

Indonesia is a highly diverse country, containing the third largest area of tropical rainforest in the world, and the fourth largest forest carbon stock.¹⁶⁸ A country with a population of 240 million inhabitants, Indonesia is home to an estimated 50-70 million indigenous peoples according to a national indigenous peoples organization.¹⁶⁹

Indonesia's territory is 68% forest cover, including carbon-rich old growth forests, rainforests, and peatland forests.¹⁷⁰ The annual deforestation rate between 2005 and 2010 was 0.71%, representing 60% of the country's carbon emissions.¹⁷¹ Main drivers of deforestation include agricultural expansion (palm oil and monocultures), small-scale agriculture, legal and illegal logging for pulp, paper and timber, oil extraction, mining, and forest fires.¹⁷²



A 1967 forestry law designated all lands as either proprietary or state-owned, regardless of customary land use, placing 62-69% of Indonesia's forests under the control of the Ministry of Forestry.¹⁷³ A 2013 constitutional court ruling decided that customary use forests are not *de facto* state forests, but very little land titling of forests

¹⁶⁸ Mulyani & Jepson, 2013

¹⁶⁹ "Aliansi Masyarakat Adat Nusantara (Indigenous Peoples' Alliance of the Archipelago), 2014

¹⁷⁰ The REDD Desk: Indonesia 2013

¹⁷¹ FAO, 2010; Mulyani & Jepson, 2013

¹⁷² The REDD Desk: Indonesia 2013; Veierland, 2011

¹⁷³ Mulyani & Jepson, 2013

to communities has occurred. In 2009, communal forest management was officially recognized on only 0.5% of the forested area in Indonesia¹⁷⁴ and forest tenure remains highly uncertain for many forest-dependent communities.¹⁷⁵

Indonesia has made substantial commitments to reduce deforestation and engage with REDD+. In 2009, then president Yudhoyono made a commitment to reduce the country's carbon emissions from a "business as usual scenario" by 26% unilaterally or by 41% with international aid by the year 2020.¹⁷⁶ In 2011, the government signed a joint agreement with Norway, receiving significant funds to facilitate the development of REDD+. This included a moratorium on granting new concessions in old growth forests and peatland forests. While this was a large gain for limiting carbon emissions from carbon-rich peatlands, the scope of the moratorium was limited. Larger areas of rainforests can continue to be logged if they are not old growth; a rush of permits was issued immediately before the moratorium; permits could still be issued for these prohibited areas if a sugarcane plantation for biofuel production was created; and a list of degraded lands available for development was expected to include much forested land.¹⁷⁷ This moratorium was extended for two additional years in 2013, although it was not strengthened.¹⁷⁸ Indonesia is on the forefront among REDD+ nations in passing national legislation, and has already passed several laws addressing REDD+ implementation, demonstration activities, and licensing.¹⁷⁹

REDD+ Challenges

Indonesia is more advanced in the development of REDD+ than most participating countries. Major issues that have emerged are (1) insecure land tenure; (2) lack of stakeholder participation; and (3) continued exploitation of forest resources.

Land tenure issues in Indonesia are particularly difficult to resolve because most forested land has been held by the state with little effort to transfer titles to community users. In Sunderlin et al.'s comparative study of REDD+ sites in five countries, Indonesia had the highest rate of tenure insecurity (85% of study villages). There were also high rates of external users extracting from forests (90% of study villages).¹⁸⁰ Recent rulings by the constitutional court have benefitted customary users on paper, but this has yet to be seen extensively in practice and many still do not hold land titles to the forests they rely on.¹⁸¹ If the state holds title to the land, it can declare a REDD+ project in a region without community consent.¹⁸² Corruption and lack of coordination among bureaucracies has exacerbated the inefficiency of state forest management and titling.¹⁸³

Free, prior and informed consent has not been properly conducted for many REDD+ projects in Indonesia. Some pilot studies have refrained from using the label "REDD+",

¹⁷⁴ Veierland, 2011

¹⁷⁵ Lang 2013i

¹⁷⁶ Mulyani & Jepson, 2013

¹⁷⁷ Edwards et al., 2012

¹⁷⁸ Lang 2013j

¹⁷⁹ Wright, 2011

¹⁸⁰ Sunderlin et al., 2014

¹⁸¹ Lang 2013i

¹⁸² Wright, 2011

¹⁸³ Mulyani & Jepson, 2013

primarily for fear that long-term REDD+ funding will not materialize.¹⁸⁴ A statement from the forest organization Mantir Adat (Custom Keepers) in Central Kalimantan called for the end of REDD+ in their area because of the imposed nature of the projects. Nonetheless, several signers eventually retracted this statement, illustrating the confusion and contention around REDD+. ¹⁸⁵ While, there has been a push to include safeguards in Indonesia's REDD+ framework, their formalization is still in progress.¹⁸⁶

A fundamental concern for the effectiveness of REDD+ is the continued profitability of unsustainable use of forests. Indonesia has long used its forests for profit and export, and today focuses intensively on palm oil and paper pulp. Elites who have profited from these industries are very wealthy and politically powerful.¹⁸⁷ It will take a high price of carbon to compensate for these foregone opportunity costs and ensure forests are not converted to these lucrative land uses.¹⁸⁸

REDD+ and Indigenous Peoples

The government of Indonesia has no unifying piece of legislation recognizing indigenous groups. Government officials have at times claimed that nearly the entire country is comprised of indigenous peoples, and thus no groups can claim special rights based on their indigeneity.¹⁸⁹

In addition to encountering the same challenges with REDD discussed above, indigenous groups suffer from a lack of formal recognition. Indigenous inclusion in the REDD+ planning process has occurred through civil society organizations representing them and other local communities.¹⁹⁰ Additionally, indigenous groups experience widespread land tenure insecurity, leading some to argue that indigenous rights and secure tenure must be a prerequisite for participation in REDD.¹⁹¹ The recently created Licensing Decree dictates that REDD+ financial benefits should be divided 70% to the community, 10% to the government, and 20% to the project developer, but it remains to be seen if this distribution of benefits will be put into practice.¹⁹²

REDD+ in Indonesia

- 29 REDD+ projects; 45 REDD-Readiness initiatives
- UN-REDD partner country
- World Bank FCPF participant
- Several provinces in Indonesia (Aceh, Central Kalimantan, East Kalimantan, Papua, West Kalimantan, West Papua) are members of the Governors' Climate & Forests Task Force.
- The Government of Central Kalimantan has used REDD+SES.

¹⁸⁴ Sunderlin et al., 2014

¹⁸⁵ “Lang 2011b; Wright, 2011

¹⁸⁶ The REDD Desk: Indonesia 2013

¹⁸⁷ Edwards et al., 2012

¹⁸⁸ Edwards et al., 2012; Sunderlin et al., 2014

¹⁸⁹ Aliansi Masyarakat Adat Nusantara (Indigenous Peoples' Alliance of the Archipelago), 2014

¹⁹⁰ Veierland, 2011

¹⁹¹ Wright, 2011

¹⁹² Wright, 2011

Key REDD+ Actors

- A REDD+ Task Force was appointed by the president in 2011 after the Letter of Intent was signed with Norway; however, there are tensions among different ministries (such as the Ministry of Forestry) and other levels of government over responsibility for REDD+ development.¹⁹³
- There are also 10 working groups that consist of both government and non-governmental representatives. International and national NGOs are actively involved in capacity building and pilot projects.¹⁹⁴

REDD+ Funding

- Indonesia has received more international funding for REDD+ than any other country, and has been promised US\$4.4 billion from all financiers via loans and grants.¹⁹⁵
- Australia and Indonesia formed a forest carbon partnership in 2008, providing up to AU\$100 million (US\$87.7 million).¹⁹⁶
- Indonesia and Norway signed a letter of Intent in 2011 that provided US\$1 billion towards setting up REDD+. ¹⁹⁷
- Other major funders include the German government and the World Bank's FCPF.

¹⁹³ Mulyani & Jepson, 2013

¹⁹⁴ The REDD Desk: Indonesia 2013

¹⁹⁵ Mulyani & Jepson, 2013; The REDD Desk: Indonesia 2013

¹⁹⁶ Wright, 2011

¹⁹⁷ Edwards et al., 2012

GUYANA



Country Background

Located in the northeastern corner of South America, Guyana's heavily forested country ranges from rainforest to dry evergreen forests and marsh forests. As of 2010, 87% of Guyana's land area was covered by forests and registered an estimated annual deforestation rate of 0.06%.¹⁹⁸ A 2011 government study identified mining as the principal driver of deforestation in Guyana, however other causes include infrastructure, agricultural conversion, illegal logging, and fire.¹⁹⁹ The country forms part of the Guiana Shield Rainforest and has an estimated 1,200 vertebrate species and over 6,000 plant species.²⁰⁰ Guyana has very low levels of economic development and is highly dependent on agricultural commodities and extractive industries (e.g. gold and bauxite). Eighty-four percent of forests in Guyana are owned and managed by the state, with much of the remaining forests (14%) under communal control by indigenous Amerindians.²⁰¹ There are still pending issues regarding untitled Amerindian communities.

Guyana is pursuing a Low Carbon Development Strategy (LCDS) with funding from Norway. This strategy aims to increase enforcement of environmental regulations, create employment opportunities, and provide forest communities with an Opt-in mechanism to join the national-level REDD system linked to the



¹⁹⁸ Guyana Forestry Commission, 2011

¹⁹⁹ Guyana Forestry Commission, 2011

²⁰⁰ International Tropical Timber Organization, 2011

²⁰¹ The REDD Desk: Guyana 2014

State Forest Estate.²⁰² Titled Amerindian Communities have the option to join the agreement and also receive payments through the national REDD mechanism. A MRV System is being developed to establish the metrics by which performance-related payments will be made throughout the MoU with Norway.²⁰³ Interestingly, these metrics will not consider the deforestation caused by the construction of Amaila Falls Hydropower Facility (funded by the Guyana REDD+ Investment Fund).²⁰⁴

Guyana is officially committed to abiding by the principle of Free, Prior and Informed Consent (FPIC). Although there are no subnational REDD programs, there are a number of conservation projects and payment for ecosystem services (PES) programs overseen by international institutions such as Conservation International and Canopy Capital.

REDD+ Challenges

There has been some confusion regarding why Norway chose to support Guyana's Low Carbon Development Strategy (LCDS) given the minimal relationship between the two countries and numerous reports warning that the partnership presented high risks due to government corruption and political oppression.²⁰⁵ A number of problems have developed in Guyana's approach to REDD. In 2013, political disagreements led development company Sithe Global to withdraw from the REDD+ Amaila Falls Dam Project after which the Inter-American Development Bank (IDB) stopped due diligence on the project. In the same year, Norway delayed REDD+ payments to Guyana while it worked on "improving the financial mechanisms" of REDD+. ²⁰⁶ Part of the problem has been the failure of Guyana's Office of Climate Change to produce the concept notes required for REDD+ projects.

REDD+ and Indigenous Peoples

There are numerous conflicts in Guyana regarding overlapping claims of indigenous land rights and extraction concessions. In recent years, Guyana's High Court has repeatedly ruled in favor of mining interests. One of the most controversial rulings concluded that indigenous peoples are not permitted to cancel any mining permits issued before their territorial rights were formalized under the law.²⁰⁷ In the case of the Isseneru Village, for example, this ruling has meant that the newly won titles to traditional indigenous territory are overrun by mining concessions.²⁰⁸ Of course, this not only affects indigenous peoples' ability to participate in REDD+, but also the integrity of their control over their own territories and livelihoods. Another concern is the failure of the Guyana Forestry Commission (GFC) to address illegal logging.

In a Verification Audit of Guyana's REDD+ program, the Rainforest Alliance concluded that of ten indicators, Guyana had only met three, while another four were only partially met and three were entirely unmet.²⁰⁹ The three indicators Guyana has failed to meet are: 1)

²⁰² The REDD Desk: Guyana 2014

²⁰³ The REDD Desk: Guyana 2014

²⁰⁴ The REDD Desk: Guyana 2014

²⁰⁵ Lang, 2013f

²⁰⁶ Lang, 2013d

²⁰⁷ Lang, 2013e

²⁰⁸ Lang, 2013e

²⁰⁹ Donovan et al., 2012

transparent and effective consultation with stakeholders; 2) the protection of indigenous peoples' rights; and 3) development of specific measures to reduce forest degradation within the forest sectors. Amerindian communities in Guyana are particularly concerned about transparency issues around REDD+ and observe that many of their land titling concerns have not been addressed within the time frame established by the Amerindian Act.²¹⁰ While some indigenous communities are interested in the "Opt-in" option for Guyana's REDD+ program, there is also concern that communities who opt-out will be excluded from demarcation funding, thereby forestalling the land titling process for non-REDD communities.

REDD+ in Guyana

- Guyana is a World Bank FCPF pilot country and a UN-REDD Partner country
- Guyana is developing a national-level REDD system as part of its Low Carbon Development Strategy

REDD+ Actors

- Guyana's Office of Climate Change (OCC) oversees issues related to climate change, including REDD and the LCDS.
- The Guyana Forestry Commission is in charge of the technical implementation of REDD.

Funding

- In 2008, Norway signed a Memorandum of Understanding (MoU) with Guyana committing up to US\$ 250 million over five years (2010 - 2015) to help Guyana implement its LCDS through the Guyana REDD+ Investment Fund (GRIF) overseen by the World Bank. GRIF includes funds for proposed projects such as the Amaila Falls Hydropower Facility, the demarcation of Amerindian Lands, and Institutional Strengthening of REDD+.
- Other REDD funding comes from Inter-American Development Bank (IDB), Conservation International, and KfW (German development bank) to strengthen government institutions overseeing REDD+.
- Guyana expects to receive US\$3.6 million through FCPF to implement Readiness Preparation Proposal (R-PP) activities.

²¹⁰ Donovan et al., 2012

PERU



Country Background

Peru is a country of immense biological and cultural diversity. With over 21,462 plant and animal species, Peru is considered a mega-diverse nation. Forty-five percent of Peru's population is indigenous and more than 65 ethnic groups inhabit the Amazon Basin of Peru. The country's many biomes range from arid coastal plains to the Andes Peaks to the tropical forest of the Amazon Basin, the latter of which constitutes the vast majority of Peru's territory.

Sixty percent of Peru's land area is forested (73.3 million hectares). While formal rights are still pending in many areas, 20-40% of these forests are located in indigenous territory.²¹¹



Peru has an annual deforestation rate of 0.2 percent and deforestation is identified as the primary source of greenhouse gas emissions in the country.²¹² The main drivers of deforestation include agriculture and livestock, urban development, communications infrastructure, mining, and oil extraction. In 2008, Peru's government announced its intention to reduce deforestation to a rate of zero by the year 2021.

Peru has a weak system of land tenure²¹³ and there are many conflicting claims on land rights and usage concessions. As of 2013, a bill was in Congress to recognize holders of forest rights as entitled to economic benefits from ecosystem services. Until now, indigenous peoples have had use rights, but not

²¹¹ Espinoza Llanos & Feather, 2011

²¹² The REDD Desk: Peru, 2014

²¹³ MINAM, 2010

ownership rights to the forests.

Peru takes a nested approach to REDD+ (with varying rates of implementation at different scales). There are REDD+ programs at the national, subnational, and project level. Some of these projects are linked to REDD-readiness through support from private institutions or NGOs; others are carbon sequestration projects linked to the voluntary carbon market. There is very little communication between the projects. Peru proposes a national MRV system for REDD+. However, as of 2013, Peru still lacked a national system for MRV, though it does have several pilot initiatives. Both the R-PP and the FIP require stakeholder involvement in design and implementation of REDD+ in Peru.

REDD+ Challenges

There are three general areas of concern regarding the implementation of REDD in Peru: 1) Economic and political conditions continue to be conducive to increased deforestation and degradation; 2) Land tenure disputes and overlapping usage claims; and 3) Inequalities and lack of clarity in REDD+ design and implementation.

Peru is considered to have low institutional capacity for law enforcement, forest monitoring, and the prevention of illegal forest degradation. There are significant overlaps between original land rights belonging to indigenous people and the legal (or illegal) access rights acquired for activities such as mining, agro-industrial plantations, and oil and gas exploitation.²¹⁴ Although 15 million hectares of tropical forest are legally recognized as having some form of indigenous ownership or management, there are at least another 8 million hectares with pending applications as indigenous reserves.²¹⁵ These indigenous claims often overlap with pending concessions to oil, gas, or other extractive industries.

Peru lacks an integrated land-use plan for the nation, allowing for contradictions to exist between policies at different scales of government. The lack of effective management and oversight means that REDD+ programs are being developed at the same time that forest degradation continues and is even allowed to expand. For example, in 2013, *The Guardian* found that the illegal gold mining occurring in “Madre de Dios, Peru, exceeds the combined effects of all other causes of forest loss in the region, including from logging, ranching and agriculture.”²¹⁶ Similarly, the government has announced a new law that intends to expand investments in Peru’s oil and gas sector, potentially violating indigenous peoples’ rights and territorial claims.²¹⁷

The establishment of a baseline to verify REDD+’s contribution to reducing deforestation rates is also deeply problematic. For example, the REDD+ project run by Conservation International (CI) in the Alto Mayo Protected Forest located in the Peruvian Amazon has been accused of using a “Cumulative Deforestation Model” that allowed CI to “dramatically increase the baseline deforestation rate” by three times what was observed using other baseline instruments.²¹⁸ The manipulation of baselines in this manner not only affects the amount of carbon payments allotted, but, more importantly, distorts measurements of how much carbon is actually sequestered as a result of project interventions.

²¹⁴ Dourojeanni, Barandiarán, & Dourojeanni, 2009; Espinoza Llanos & Feather, 2011

²¹⁵ Espinoza Llanos & Feather, 2011

²¹⁶ Collyns, 2013

²¹⁷ Hill, 2014

²¹⁸ Lang, 2013b

REDD+ and Indigenous Peoples

Amazonian people depend on tropical forests for their livelihoods. A thorough review of REDD+ projects in Peru by AIDESEP (Inter-Ethnic Association for the Development of the Peruvian Amazon) and Forest People's Programme highlights the numerous concerns regarding how indigenous peoples are (and are likely to be) affected by REDD.²¹⁹ Generally, these projects fail to secure free, prior and informed consent (FPIC) with indigenous communities; operate with low levels of transparency; fail to provide clear guarantees of indigenous and local peoples' forest use and access rights; and allow intermediaries to charge exorbitant fees for technical services.²²⁰

Of 35 projects in various stages of REDD+ in Peru, 11 are planned in recognized indigenous lands and 8 are operating in customary lands that have not been legally recognized.²²¹ Indigenous peoples' concerns regarding REDD+ programs in Peru include fears that REDD+ could lead to massive land grabs of indigenous lands where legal rights are still pending; that it will fail to reduce contradictory policies encouraged by other government sectors (e.g. mining, oil/gas, agro-industry); that it will allow unregulated projects in indigenous territories and exploitation by "carbon cowboys"; and that it will lead to increased conflicts over land and resources.²²² In addition, a letter from AIDESEP to the Forest Investment Programme in 2013 observes that the FIP's revised investment strategy withdraws agreements made with indigenous peoples in public workshops and in consultation with AIDESEP, thereby significantly eroding indigenous peoples' trust in the REDD+ process.²²³

In an analysis of key stakeholders involved in Peru's REDD+ programs, White observes that tensions over REDD+ have led to important dialogues nationally and internationally.²²⁴ Nonetheless, White also concludes that the government and World Bank approach to REDD+ is incompatible with the Alternative REDD+ suggested by AIDESEP, requiring "parallel implementation...for them to co-exist."²²⁵

REDD+ in Peru

- 19 REDD+ projects; 16 REDD-Readiness initiatives
- UN-REDD partner country
- World Bank FCPF participant
- Several Peruvian states (Madre de Dios, Amazonas, Loreto, San Martín, Ucayali) are members of the Governors' Climate & Forests Task Force (GCF)
- REDD+SES Safeguards are starting to be used in the San Martín region

Key REDD+ Actors

- The Ministry of Environment is the principal agency overseeing REDD+. However, regional governments also play a key role in surveillance and natural resource control. Peru

²¹⁹ Espinoza Llanos & Feather, 2011

²²⁰ Espinoza Llanos & Feather, 2011

²²¹ Espinoza Llanos & Feather, 2011, p. 8

²²² Espinoza Llanos & Feather, 2011

²²³ Lang, 2013a

²²⁴ White, 2013

²²⁵ White, 2013

has yet to establish an institution specifically assigned to oversee REDD+ readiness.

- OCBR (Órgano de Coordinación de Bosques y REDD+), the coordinating body for forests and REDD+, oversees the design and implementation of REDD.
- Indigenous groups (AIDESEP and CONAP²²⁶) have been added to the FIP Steering Committee and have formed an Indigenous REDD+ Group to facilitate indigenous dialogue with REDD institutions and the state.

REDD+ Funding

- The World Bank's Forest Investment Plan approved US\$ 50 million for REDD+ in Peru²²⁷.
- Pilot MRV initiatives have support from the German Development Bank, the Gordon and Betty Moore Foundation, and the Japan International Cooperation Agency.

²²⁶ Confederation of Amazonian Nationalities of Peru

²²⁷ CIFOR 2014

ECUADOR



Country Background

Ecuador is a relatively small (283,561 km²) yet mega-diverse country. It is home to 18% of the world's bird species, 10% of vascular plant species, 8% of mammal species, and 10% of amphibious species. This diversity is due to the vastly different eco-regions contained within the country's borders, namely the Galapagos islands, mountainous Andes, coastal plains, and Amazon basin region.²²⁸ The nation is also home to an array of indigenous groups that comprise 14% of the population.²²⁹

Thirty-six percent of Ecuador's national territory is forested, 80% of which is contained within Ecuador's portion of the Amazon basin.²³⁰ The majority (65%) of Ecuador's forests are under local and indigenous ownership.²³¹ Annually, Ecuador's deforestation rate between 2005 and 2010 was 1.89% or 198,000 hectares per year, one of the highest in Latin America.²³² Primary drivers of deforestation include agricultural expansion (including agro-industrial production such as palm oil), logging, mining, oil extraction, and infrastructure expansion.²³³ Reducing deforestation and mitigating climate change have been addressed as legislative national priorities at the same



²²⁸ The REDD Desk: Ecuador, 2011; Reed, 2011

²²⁹ Indigenous Working Group for Indigenous Affairs (IWGIA): Ecuador, 2014

²³⁰ FAO, 2010; The REDD Desk: Ecuador, 2011

²³¹ Krause et al., 2013; Reed, 2011

²³² FAO, 2010

²³³ The REDD Desk: Ecuador, 2011

time that resource extraction continues for export.

Agrarian reform laws of the 1960s and 1970s that encouraged occupation of indigenous lands have shaped land tenure in Ecuador. A 1964 law declared large portions of indigenous ancestral land as *tierras baldías* (or vacant lands), facilitating settlement and encouraging deforestation to secure *de facto* land tenure.²³⁴

The Ministry of the Environment²³⁵ (MAE) coordinates all REDD+ activities, including the REDD-Readiness initiative Socio Bosque. In anticipation of REDD+, this incentive program was established in 2008 to provide annual payments to private and communal landowners for forest conservation. Payments start at the low rate of US\$30 per hectare and are founded on 20-year contracts that have the potential for renewal. As of October of 2012, there were more than 123,000 beneficiaries of the Socio Bosque program.²³⁶

Currently, preparations for REDD+ are occurring on both the national and project levels. Ecuador's REDD+ program has incorporated REDD+ Social and Environmental Safeguards, as it is a pilot country for these voluntary standards that focus on indigenous and local community rights, biodiversity, and social/environmental benefits.²³⁷ A National Advisory Committee (COASNA²³⁸) has been created to facilitate stakeholder participation in the National Joint Programme in charge of developing REDD+ for the country. Members of the committee include representatives from the government, civil society, and indigenous groups.²³⁹

REDD+ Challenges

Several challenges have emerged in the implementation of REDD+ in Ecuador, including: (1) inequality generated via the Socio Bosque program; (2) lack of clarification regarding ownership of ecosystem services; and (3) continued extraction of lucrative oil reserves.

Socio Bosque provides an opportunity to investigate the effects of a PES program in Ecuador before REDD+ is fully implemented. Distribution of knowledge remains a large barrier to equitable and full participatory involvement in the program. Many communities entered the program based on votes in the community assembly, but most members did not know how the incentives were managed or the terms of the agreement. Program benefits are distributed based on existing community power hierarchies rather than according to the burden of implementation and foregone opportunity costs. For example, women were less informed about the program and may sacrifice more land access for conservation without receiving increased payment. Krause et al.'s case study illustrates that inclusive participation, information sharing and incentive management should be improved and community hierarchies of power should be buffered²⁴⁰. However, Krause et al. also note that efforts to enforce equity in benefits sharing and participation may violate community autonomy.²⁴¹

²³⁴ Holland et al., 2014

²³⁵ *Ministerio del Ambiente*

²³⁶ Krause et al., 2013; Ministerio del Ambiente 2012)

²³⁷ Krause et al., 2013; The REDD Desk: Ecuador, 2011

²³⁸ *Comité Asesor Nacional*

²³⁹ The REDD Desk: Ecuador, 2011

²⁴⁰ Krause et al., 2013

²⁴¹ Krause et al., 2013

Long-term funding for Socio Bosque remains uncertain, agency coordination is not smooth, and payments are low compared to lost opportunity costs.²⁴² Although REDD+ programs demand proof of additionality, Socio Bosque does not. New REDD+ programs may not reward communities who have been successful forest conservationists and who currently benefit from Socio Bosque's financial incentives.²⁴³

Ecuador's 2008 Constitution was drafted with considerable input from indigenous groups and is considered the world's first "eco-constitution."²⁴⁴ However, its interpretation has been subject to controversy. The Constitution gives the state authority over forests and declares that "environmental services are not susceptible to appropriation; [and] that their production, provision and use will be regulated by the National Government".²⁴⁵ It is thus unclear how and to what degree indigenous peoples and forest dependent communities will benefit from ecosystem services, since they will be largely controlled by the state.

At the same time that it is promoting REDD+, the Ecuadorian government continues to permit the exploitation of vast oil reserves in the country. The national government owns subsurface rights and oil sales have played an invaluable role in the country's economy, constituting more than half of the country's exports for the first 30 years after oil's discovery.²⁴⁶ Oil exploration continues to be permitted in indigenous-controlled lands and protected areas.²⁴⁷ The national government attempted to prevent drilling in the oil-rich Yasuní-ITT²⁴⁸, offering to leave nearly 900 million barrels of oil in the ground if international donors provided sufficient funding to compensate for the foregone revenue.²⁴⁹ Unfortunately, this initiative failed to meet funding goals and President Correa has announced intentions to begin oil drilling in the area.²⁵⁰

REDD+ and Indigenous Peoples

Indigenous groups in Ecuador have become a powerful coalition, influencing presidential selections and the writing of the most recent constitution.²⁵¹ The Confederación de Nacionalidades Indígenas del Ecuador (CONAIE) unites indigenous groups from all over the country. However, it is also important to note that not all IPs feel the organization represents their interests. Although CONAIE is against both Socio Bosque and REDD+, the participation of indigenous groups in Socio Bosque continues to increase.²⁵²

Because indigenous groups control the majority of forested lands in Ecuador, REDD+ cannot be accomplished in the country without their cooperation.²⁵³ Some IPs refuse REDD+

²⁴² Reed, 2011

²⁴³ Krause et al., 2013

²⁴⁴ Reed, 2011

²⁴⁵ The REDD Desk: Ecuador, 2011

²⁴⁶ Holland et al., 2014

²⁴⁷ Holland et al., 2014; Reed, 2011

²⁴⁸ The Yasuni-ITT stands for Yasuni – Ishpingo Tambococha Tiputini, which are a set of oil reserves located within Ecuador's Yasuni National Park.

²⁴⁹ Martin, 2011

²⁵⁰ Editorial Board, 2013

²⁵¹ Reed, 2011

²⁵² Indigenous Working Group for Indigenous Affairs (IWGIA): Ecuador, 2014; Krause et al., 2013; Reed, 2011)

²⁵³ Reed, 2011

on the grounds that it represents a continuation of neoliberal policies and encourages the expansion of international markets largely responsible for environmental destruction and disenfranchisement in the first place.²⁵⁴ Other IPs are demanding increased participation in the design of REDD+ projects in order to shape the program according to their own needs. It is clear that REDD+ participation among indigenous groups largely depends on the degree of internal organization and the dissemination of positive or negative information about the program.²⁵⁵ For example, the American company Eco-Genesis signed an agreement with the Waorani group for rights to the environmental services generated by their communal forest for 30 years without community consultation. Although this agreement was eventually overturned, it nonetheless serves to illustrate the threat that REDD+ can pose to indigenous communities and the need for FPIC to be properly enforced.²⁵⁶

REDD+ in Ecuador

- 3 REDD+ Projects; 14 REDD-Readiness initiatives
- UN-REDD Partner country
- The Government of Ecuador has been a key actor in REDD+SES participating in the development, governance and use of the standards.

Key REDD+ Actors

- The Ministry of the Environment (MAE) oversees all REDD+ activities and includes the National Department for Climate Change Mitigation and the National Department for Climate Change Adaptation.
- A 2010 Executive Decree established the Inter-Institutional Committee on Climate Change (CICC²⁵⁷) within the MAE to coordinate all national climate change activities.
- Other institutions include the National Joint Program's executive board that contains representatives from the MAE, UN, FAO, UNDP, and UNEP, as well as a National Standards Committee for REDD+ that involves representatives from the government, civil society, local communities, and indigenous groups.
- National and/or international civil society organizations in conjunction with private businesses have facilitated pilot REDD projects.

REDD+ Funding

- Funding for REDD+ has come from the Ecuadorian government, the Food and Agriculture Organization (for a national forest evaluation), GIZ (German Federal Enterprise for International Cooperation), KfW (the German Development Bank), and the UN-REDD program.

²⁵⁴ Reed, 2011

²⁵⁵ Reed, 2011

²⁵⁶ Reed, 2011

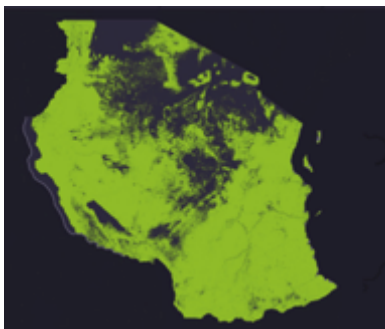
²⁵⁷ Comité Interinstitucional de Cambio Climático

TANZANIA



Country Background

Tanzania's forests are concentrated in savanna woodlands (90% of the country's forest cover). Other forest types included montane, coastal, and mangrove forest, but the majority of the country relies on the Miombo woodlands for their livelihoods.²⁵⁸ Tanzania differs from many other REDD+ countries in its lack of recognition of indigenous peoples within its territory. There are 125-130 ethnic groups in Tanzania yet only 4 self-identify as indigenous peoples (the hunter-gatherers Akie and Hadzabe and the pastoralists Barabaig and Maasai). These groups consist of over 524,000 people, which comprise just over 1% of the population.²⁵⁹



Thirty-nine percent of Tanzania's territory is forested.²⁶⁰ Within its mainland forest area, 48% is held in forest reserves, 6% is protected area, and 46% is village and general open access forests. From 2005-2010 deforestation occurred at the high rate of 1.16%.²⁶¹ The main drivers of deforestation include agricultural expansion, production of charcoal, firewood extraction, and logging.²⁶² Forest fuels from woodlands provide 95% of the country's energy needs, both rural and urban, and 75% of the country's materials for

²⁵⁸ National Bureau of Statistics: Tanzania, 2013

²⁵⁹ Indigenous Work Group for Indigenous Affairs (IWGIA): Tanzania, 2014; National Bureau of Statistics: Tanzania, 2013

²⁶⁰ FAO, 2010

²⁶¹ National Bureau of Statistics: Tanzania, 2013

²⁶² Mustalahti, Bolin, Boyd, & Paavola, 2012

construction.²⁶³

Most land in Tanzania is designated as village land (70%), in addition to reserves (28%) and open access general land (2%).²⁶⁴ Much of this village land is not officially demarcated based on actual land use patterns.²⁶⁵ The lack of formal land title can limit some communities' abilities to participate in current carbon sequestration projects (voluntary or CDM) as well as REDD+.²⁶⁶ Beginning in the 1990s, Tanzania moved toward decentralizing control over its forests through Participatory Forest Management (PFM). While Tanzania is often held up as an example of decentralization of forest control, only 10% of forests have actually achieved community forest management.²⁶⁷ Management occurs through Village Land Forest Services, in which the village council creates a management plan and takes responsibility for patrolling, and Joint Forest Management, in which the local community makes an agreement for management of state lands.²⁶⁸ Within this context, the Tanzanian government has been developing REDD+ since 2008, with the implementation phase beginning in 2013. The National REDD+ Task Force contains 13 representatives from government ministries and 1 from civil society. Since 2012, the Task Force has worked in coordination with 5 technical working groups to facilitate REDD+. One of the working groups is developing a participatory method of MRV that in addition to carbon, will also monitor livelihoods, governance, and biodiversity.²⁶⁹

REDD+ Challenges

The main concern facing Tanzania is devolving REDD+ benefits to communities who engage in REDD+ activities. These challenges can be seen in the aforementioned lack of land right demarcation, as well as the limited range of the Participatory Forest Management (PFM) process and ineffective stakeholder engagement. Although PFM has become "the overall guiding principle for forest policy in Tanzania,"²⁷⁰ actual devolution of forest management in practice is much less common than legislation would suggest. Some villages have been waiting for approval of their required forest management plans for well over a decade.²⁷¹ In response, some have turned to jointly managing state owned lands.²⁷² Mustalahti et al. argue that while REDD+ could facilitate PFM, REDD+ is likely to be just as slow and even more complex to implement than PFM.²⁷³

Both civil society organizations and indigenous groups (see below) have argued that that they have been excluded from the process of creating REDD+ in Tanzania. In response to these criticisms, one civil society representative was added to the REDD+ Task Force, and working groups were created with representatives from NGOs, civil society, and the private sector. REDD+ Social and Environmental Standards are being drafted for the country, but

²⁶³ Milledge et al., 2007

²⁶⁴ United Republic of Tanzania, Vice President's Office, 2013

²⁶⁵ The REDD Desk: Tanzania, 2014

²⁶⁶ Beymer-Farris & Bassett, 2012

²⁶⁷ Sunderlin et al., 2014

²⁶⁸ Mustalahti et al., 2012

²⁶⁹ The REDD Desk: Tanzania, 2014

²⁷⁰ Odgaard & Faustin P. Maga, 2009

²⁷¹ Mustalahti et al., 2012

²⁷² Beymer-Farris & Bassett, 2012

²⁷³ Mustalahti et al., 2012

they are not yet included in the national strategy draft. Some REDD+ pilot projects have voluntarily chosen to use standards of FPIC or obtain Verified Carbon Standard or Climate, Community, and Biodiversity Standard certification that addresses safeguards.²⁷⁴ Nevertheless, some communities remain concerned that safeguards may not be enforced on the ground and may fail to prioritize villagers' needs. In one case study, Mustalahti et al. found that villagers were primarily concerned about water scarcity, rural development, and food security, which were not directly addressed by REDD+ initiatives.²⁷⁵

REDD+ and Indigenous Peoples

The main concern regarding the impact of REDD+ on indigenous peoples in Tanzania is the lack of recognition of their identity as indigenous. The Tanzanian government does not recognize the existence of indigenous populations in their territory. As a result, most IPs do not self-identify as indigenous out of fear of being alienated by the government.²⁷⁶ Many define themselves by alternative lifestyles but not by their indigeneity. These alternative lifestyles (hunter gatherers and pastoralists) are actively suppressed by the Tanzanian government, which raises concerns regarding the ability to protect indigenous concerns raised by REDD+ in a country whose government is so hostile to these populations.²⁷⁷ Past dealings with PFM has not been favorable to indigenous peoples, as many indigenous pastoralists are excluded from decision-making around village lands because they are seen as temporary migrants instead of stakeholders.²⁷⁸

The process of REDD+ was fairly advanced before civil organizations or indigenous groups became involved.²⁷⁹ For example, the REDD+ Task Force was created without an indigenous representative. In response to this exclusion, indigenous groups formed a National Indigenous Peoples Coordinating Committee on REDD in Tanzania in 2009, and an indigenous representative was invited to contribute to the final draft of the REDD+ plan for the country.²⁸⁰

REDD+ in Tanzania

- 9 REDD+ projects; 12 Readiness initiatives
- UN-REDD partner country
- World Bank FCPF participant
- The Government of Tanzania has been a key actor in REDD+SES participating in the development, governance and use of the standards.

Key REDD+ Actors

- REDD+ project coordination is overseen by the Division of Environment in the Vice President Office, and the Forest Service manages REDD+ on the ground via the National REDD+ Task Force.

²⁷⁴ The REDD Desk: Tanzania, 2014

²⁷⁵ Mustalahti et al., 2012

²⁷⁶ Odgaard & Maga, 2009

²⁷⁷ Odgaard & Maga, 2009; Stidsen, 2009

²⁷⁸ Odgaard & Maga, 2009

²⁷⁹ Odgaard & Maga, 2009

²⁸⁰ Laltaika, 2009

- NGOs active in Tanzania's REDD+ include CARE Tanzania, WCS, WWF, African Wildlife Foundation, Tanzania Forest Conservation Group, and Tanzania Forest Community Network.²⁸¹

REDD+ Funding

- Funding has arrived from the UN-REDD Programme (US\$ 4.3 million, mostly contributed by Norway) and the Royal Norwegian Government (US\$ 80 million). Norway's funding has covered the country's pilot projects, capacity building, and the enhancement of national research capacity on climate change.
- Other funders include the UN-REDD program and the government of Finland.
- The future payment mechanism for REDD+ is still unclear. Payments may funnel through centralized, national channels or may be organized so international payments can go directly to specific projects.²⁸²

²⁸¹ The REDD Desk: Tanzania, 2014

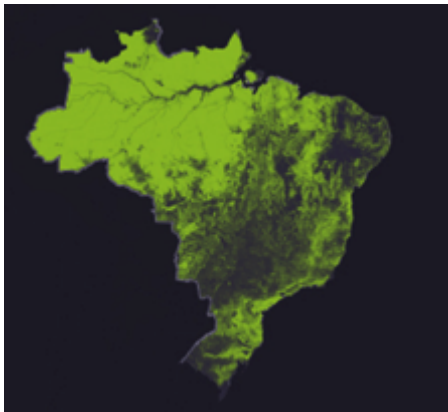
²⁸² Luttrell et al., 2013

BRAZIL



Country Background

Brazil is a highly biodiverse country and the home of the Amazon Basin, with forests covering approximately 60% of its land area.²⁸³ Due to a network of protected areas and indigenous territories, and more recent state policies removing subsidies for soy, Brazil maintains some of the best-preserved forests in the Amazon.²⁸⁴ Although Brazil has advanced numerous policies and programs to increase forest protection, deforestation and biodiversity loss continue to be a major issue of concern. According to Nepstad et al., approximately 19,500 km²/year was cleared between 1996 and 2005, making Brazil the 4th largest emitter of



carbon dioxide globally due to its high deforestation rate.²⁸⁵ Following 2005, deforestation in the Brazilian Amazon has significantly decreased (70%) due to the collapse of soy prices, state policy interventions in the forest and agricultural sector, pressure from environmental groups, and the expansion of protected reserves and indigenous territory²⁸⁶. Key drivers of deforestation in the Brazilian Amazon include: road development and expanded settlements, legal and illegal logging, mining, agriculture and ranching, especially the large-scale production of beef, timber, and soy. Cattle ranching remains the primary commercial land use in

²⁸³ Forest Trends, 2014

²⁸⁴ Agrawal et al., 2011

²⁸⁵ Nepstad et al., 2009; Long, 2013;

²⁸⁶ Nepstad et al., 2014

the Brazilian Amazon.²⁸⁷

Brazil has actively participated in international climate negotiations and is often applauded as setting an example for how developing countries can transition to a green economy. Since the 1980s, indigenous peoples' movements, environmentalists, and researchers have called attention to the social and ecological destruction caused by development in the Amazon. In recent decades, a variety of environmental laws, innovative programs and partnerships have attempted to secure a more sustainable development trajectory for the country.²⁸⁸ The Brazilian Forest Code of 1965 establishes minimum percentages of forest cover for each ecological region. In the Amazon biome, for example, landowners are required to maintain a minimum of 80% forest cover.

Although Brazil is still in the process of developing a national REDD+ strategy, actions have been taken at the national, sub-national, and jurisdictional level to advance REDD+. In 2008, Brazil launched its National Climate Change Plan and announced its commitment to reduce Amazonian deforestation by 80% in 2020. In the same year, the Amazon Fund was established as a non-reimbursable investment fund for the protection and conservation of the Brazilian Amazon. The Fund is managed by the Brazilian Development Bank (BNDES) and is considered an integral component of Brazil's REDD+ approach. Disbursements are performance-based and adhere to established REDD+ social and environmental safeguards.

Numerous REDD-related initiatives have also emerged at the state-level in Brazil. In 2008, six of Brazil's Amazonian states joined the international Governor's Climate and Forests Task Force (GCF), which aims to connect states to market and non-market financing for low-carbon rural development and REDD+. The state of Acre has been particularly active in advancing a green agenda and, since 2009, has pursued extensive territorial planning as a REDD-readiness strategy that includes registration of smallholder properties, geo-referencing of property boundaries, and land use mapping.²⁸⁹ In 2010, Acre launched the System of Incentives for Environmental Services (SISA), a state-wide program of economic incentives to reward good land stewardship practices, including activities that sequester carbon, preserve biodiversity or provide watershed protection.²⁹⁰ In addition, the state of California may soon accept carbon offsets generated in Acre as part of its recently inaugurated cap-and-trade program.²⁹¹

In the Brazilian Amazon there are at least 25 pilot REDD+ initiatives, as well as many other PES and afforestation and forest restoration programs (Duchelle et al. 2014). These initiatives operate in very different political economic contexts, with varying levels of forest cover, land tenure security, and diverse types of rural livelihoods.²⁹² The projects involve partnerships between various government agencies, donor bodies, and NGOs at multiple scales. REDD+ funding is used to improve stakeholder engagement in REDD+ design and implementation, clarify land and carbon rights, define emission reference levels and MRV, facilitate safeguards, produce policy research and advocacy, strengthen institutions, improve forest management, and provide carbon offsets and performance-based payments.²⁹³ Brazil's

²⁸⁷ Millikan, 2009; Nepstad et al., 2009; Nepstad et al., 2014

²⁸⁸ Nepstad et al., 2009

²⁸⁹ Duchelle et al., 2013

²⁹⁰ Instituto de Pesquisa Ambiental de Amazonia (IPAM), 2014

²⁹¹ Ecosystem Marketplace, 2014

²⁹² Duchelle et al., 2013

²⁹³ Forest Trends, 2014

REDD+ developments are very difficult to follow given the diversity of project elements, agreements, and partnerships; it may be a challenge for Brazil to consolidate this variety into one coherent, national REDD+ strategy.

Although the Amazon Fund adheres to REDD+ safeguards in writing, and the states of Acre and Amazonas utilize REDD+ SES, Brazil is still in the process of establishing a formal national system for addressing safeguards for REDD+. ²⁹⁴ The Brazilian Forest Service and the Brazilian National Institute of Space Research is in charge of monitoring activities in Brazil, and the Ministry of Environment submits technical notes detailing progress on emission reductions. In June of 2014, Brazil became the first country to submit a forest reference emissions level to the UNFCCC. Brazil is taking a “stepwise approach” and will continue to adjust forest emission calculations as new information becomes available. REDD+ proponents applaud Brazil’s efforts as offering an example for other countries to follow. ²⁹⁵

REDD+ Challenges

Despite notable progress in advancing REDD+ at multiple scales, Brazil’s REDD+ programs continue to face significant challenges. These include unclear land tenure, contradictory environmental and development policies, and debates over appropriate REDD+ mechanisms and safeguards.

Clear and enforceable property rights are fundamental to the success of REDD+ as currently conceived. Unfortunately, although Brazil is noted for having one of the best records of all tropical countries in clarifying ownership and access rights to forest-dependent communities, tenure insecurity is still pervasive in the Brazilian Amazon and nearly one-third of the Legal Amazon ²⁹⁶ is subject to private land claims that have yet to be officially verified. ²⁹⁷ Most forest clearing activities occur on lands without formal property titles. Hence, failure to establish and enforce clear land and carbon rights may not only jeopardize Brazil’s ability to expand REDD+ initiatives, but may also challenge its ability to meet its larger commitments to forest protection.

Land reform programs such as the Legal Land (*Terra Legal*) Program have attempted to address past land reform failures by granting land titles to smallholders claiming rights to non-designated public land in the Amazon and linking these to environmental compliance requirements (i.e. plans to maintain or recuperate 80% forest cover). However, the program has encountered many challenges and has not completed land titling to the extent expected. ²⁹⁸ Legal clarification of land tenure is a priority of REDD-readiness activities in many pilot projects and is encouraging the acceleration of land titling processes. Although researchers suggest that this titling acceleration may increase the equity of REDD+, they note that it also runs the risk of overlooking traditional forest rights, thereby causing forest users to lose access to important land areas and resources. ²⁹⁹ In addition, with the exception of Acre where carbon has been declared the property of the state, all other Brazilian states are still awaiting

²⁹⁴ The REDD Desk: Brazil, 2014

²⁹⁵ Kovacevic, 2014

²⁹⁶ The Legal Amazon is a socio-geographic area that includes all 9 states of the Amazon Basin.

²⁹⁷ Duchelle et al., 2013; Millikan, 2009, p. 5

²⁹⁸ Duchelle et al., 2013

²⁹⁹ Duchelle et al., 2013, p. 11

clarification of who owns the right to the carbon sequestered in forests.

As in many countries, REDD+ has been hotly debated in Brazil and numerous groups and communities have expressed their opposition to REDD+. Various social movements, NGOs, and indigenous groups have requested the Brazilian government reject REDD+. ³⁰⁰ They question the market-based approach sought by some REDD+ proponents and insist that the government focus instead on comprehensive land reform and the demarcation of indigenous territory. ³⁰¹ Some critics draw attention to rural policies that contradict REDD and other environmental programs, such as rural credit programs that stimulate extensive cattle ranching, large-scale infrastructure projects, expansion of oil and gas extraction, and monoculture plantations of eucalyptus for paper production. ³⁰² Others note that incentives to preserve forests have been weakened in recent years as a result of increasing commodity prices for beef and soy, as well as the 2012 revisions to the Forest Code, which reduced forest cover obligations in certain regions of Brazil. Researchers from the World Rainforest Movement note that the recent changes to the Forest Code have undermined landowners' interests in participating in the Monte Pascoal-Pau forest restoration project in Bahia. As a result, the coordinating NGO was unable to deliver the amount of sequestered carbon it had already sold as carbon credits to the Natura Company. ³⁰³

In sum, the concerns and challenges associated with REDD+ in Brazil have been similar to those encountered in other countries, particularly issues of land tenure and carbon rights. Many dimensions of REDD+ continue to be debated. For example, although REDD+ credits have only been subject to voluntary purchase thus far, some fear that the sudden integration of REDD+ credits to the carbon market could destabilize the market and cause carbon prices to plummet internationally. In addition, there are continuing debates regarding the extent to which landowners should be compensated by REDD+ for fulfilling their forest cover obligations required by the Forest Code. Opponents argue that landowners should not be compensated for being in violation of the law and that the reforestation of degraded lands does not fulfill additionality requirements. ³⁰⁴ Supporters, however, argue that this economic support is critical to helping landowners transition to sustainable land use practices and point to other cases in which PES payments have been used successfully to incentivize compliance with national environmental laws. ³⁰⁵

REDD+ and Indigenous Peoples

Indigenous peoples (IPs) live in and manage at least 25% of the Brazilian Amazon. They play an integral role in protecting precious forest and water resources and will be deeply affected by REDD+. Both the diversity of indigenous peoples and the variegated forms of REDD+ in Brazil mean that there is no single indigenous experience or perspective on REDD+. Long instead suggests that REDD+ outcomes are context-specific and that

³⁰⁰ Zhouri, 2010

³⁰¹ Zhouri, 2010

³⁰² Carbon Trade Watch, "2014; Millikan, 2009

³⁰³ Kill, 2013

³⁰⁴ Duchelle et al., 2013

³⁰⁵ Duchelle et al., 2013

indigenous peoples must consider REDD+ projects carefully on a case-by-case basis.³⁰⁶

Brazil is faced with the complex challenge of mitigating climate change while also protecting its tropical forests and fulfilling obligations to IPs. The 1988 Constitution provides strong protections for indigenous peoples and establishes the Union's responsibility to demarcate, protect and guarantee respect for indigenous peoples' traditional territories and assets.³⁰⁷ Although the implementation of these rights is a long process and IPs have a extensive history of being marginalized by the Brazilian state, Long notes that there have been positive gains for indigenous rights in recent years, citing, for example, the Supreme Court's decision to uphold the demarcation of Raposa Serra in 2009.³⁰⁸

Throughout the world, many IPs have approached REDD+ with skepticism and Brazil is no exception. Depending on the particular project structure, REDD+ initiatives can produce negative impacts for IPs. When property rights are unclear or unenforced, IPs are at risk of losing forest access rights and/or being excluded from REDD+ benefits. Some REDD+ projects are poorly designed and lead to limits on livelihood activities, thereby producing dependence on REDD+ funding. Already, REDD+ pilot projects have produced controversial outcomes in some indigenous communities. The Guaraquecaba Climate Action Project, for example, a REDD+ initiative led by The Nature Conservancy in collaboration with American Electric Power, General Motors, Texaco as well as Brazil-based organizations, has been labeled one of the ten worst REDD-type projects in Latin America by a coalition of indigenous and activist organizations. It is criticized for limiting the livelihood practices of the Guarani people and using armed guards from the Force Verde to patrol REDD+ areas.³⁰⁹

Despite worrisome examples of REDD+ projects and continuing concerns regarding the commodification of IPs' forests, there are also cases of REDD+ in Brazil that have been considered successful collaborations between NGOs and IPs. If designed correctly, Long notes that REDD+ can increase income and livelihood options for IPs and rural populations. It can also facilitate secure property rights and state recognition of indigenous territory.³¹⁰ Some proponents suggest that REDD can be designed to co-exist with many indigenous activities, thereby providing additional income to IPs.³¹¹

REDD+ in Brazil

- Over 25 REDD+ pilot projects
- Six Brazilian states (Acre, Amapá, Amazonas, Mato Grosso, Pará, Tocantins) are members of the Governors' Climate & Forests Task Force (GCF)
- In 2010, a Memorandum of Understanding was signed between the governors Acre, Brazil and California to facilitate an offset program for REDD+ in Brazil that would link to California's carbon market.
- State governments of Brazil have been key actors in REDD+SES participating in the development (Pará) and use (Acre and Amazonas) of the standards.

³⁰⁶ Long, 2013

³⁰⁷ Zhouri, 2010

³⁰⁸ Long, 2013

³⁰⁹ Long, 2013

³¹⁰ Duchelle et al., 2013; Long, 2013

³¹¹ Long, 2013

Key REDD+ Actors

- Interagency Task Force on REDD and Climate Change created by President Lula in 2009
- Ministry of the Environment

REDD+ Funding:

- As of 2012, Brazil had over US\$1 billion committed to financing REDD+, with most of it being held in the Amazon Fund. Norway has contributed over half of this funding and more than US\$266 million has already been disbursed.

5. Approaches for an Alternative REDD+ Vision



REDD+ is a mechanism that aims to mitigate climate change through a set of policies and programs that conserve and enhance carbon in the forests of developing countries. The fact that much of the remaining forest areas are owned, managed or inhabited by indigenous peoples means that their territories have become a priority for REDD+ activities. In its current form, REDD+ has raised a series of red flags for indigenous peoples. The mainstream approach to REDD+ has been driven by market logic; it has utilized top-down governance structures; failed to sufficiently address or resolve land tenure claims; and, in many cases, has failed to respect indigenous rights of FPIC, as evidenced in many country profiles presented in this report. For these reasons, many indigenous communities and organizations have expressed concern about the form, design and implementation of REDD+.

In response to the mainstream approach to REDD+, scholars, social movements, NGOs and indigenous peoples have argued urgently for the development of alternative approaches to reducing deforestation and forest degradation. According to Pokorny et al “REDD+ projects can be expected to have poor social and environmental outcomes unless they use substantially different approaches, which build on the capabilities of the wide range of local natural

resources managers to undertake efficient resource management and conservation”.³¹² Indigenous peoples with a demonstrated history of sustainable forest management can provide critical guidance in building an alternative approach to REDD+.

Indigenous peoples have increasingly inserted themselves into climate change debates as a way to influence effective and equitable mitigation strategies. During the 8th COP (2002) in New Delhi, indigenous peoples made the statement “Our duty as indigenous peoples to Mother Earth impels us to demand that we be provided adequate opportunity to participate fully and actively in all levels of local, national, regional and international decision-making processes and mechanisms in climate change”.³¹³ In addition, a recent report by the Special Rapporteurs of the UN Permanent Forum on Indigenous Issues (UNPFII) argues that indigenous peoples’ biocultural perspective and approach have credence because of the long history and success of indigenous peoples in protecting forests and biodiversity. It reads:

“We as indigenous peoples have preserved the biodiversity of our lands for hundreds of years by caring for nature and using it only in sustainable ways. The places where we have been able to live free from so-called development are now recognized as the most biologically diverse places on earth. With such a track record, we of all people are justified in demanding that we be allowed to continue our traditional uses of plants and animals.”³¹⁴

NGOs and indigenous groups have offered alternative proposals and visions of REDD+ on multiple scales. For example, the US-based Indian Law Resource Center draws on international law to develop 10 key principles for REDD+ to guide the actions of national and international actors.³¹⁵ COICA³¹⁶, a coordinating body representing a network of 9 indigenous organizations in the Amazon Basin, provides critical indigenous perspective on an alternative to REDD+³¹⁷. A coalition of Peruvian regional and national organizations (including AIDESEP, FENAMAD and CARE)³¹⁸ provide recommendations for REDD+ based on an analysis of the policies and impacts of REDD+ in Peru³¹⁹. AIDESEP has published a concise report emphasizing the importance of indigenous peoples’ territorial and collective rights³²⁰. And IPCC³²¹ utilizes a biocultural approach that emphasizes the importance of non-market approaches and non-carbon benefits in REDD³²².

³¹² Pokorny et al., 2013

³¹³ Tauli-Corpuz & Lynge, 2008, p. 11

³¹⁴ Tauli-Corpuz & Lynge, 2008, p. 21

³¹⁵ Crippa & Gordon, 2013

³¹⁶ Coordinator of Indigenous Organizations of the Amazon River Basin (*Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica*)

³¹⁷ COICA Report

³¹⁸ AIDESEP (Interethnic Association of the Peruvian Amazon), FENAMAD (Federation of the Native Peoples of the River Madre de Dios and its tributaries), and CARE (Asháninka Center of the River Ene)

³¹⁹ Espinoza Llanos & Feather, 2011

³²⁰ AIDESEP 2011

³²¹ Indigenous People’s Biocultural Climate Change Assessment Initiative

³²² IPCC, 2013

All of these organizations advocate for due respect of indigenous rights under UNDRIP in all REDD policies and programs. These include rights to self-determination and FPIC, to secure and expanded land tenure prior to REDD+ implementation, and to protection against forced displacement. They also advocate that REDD+ address economic drivers of deforestation, utilize non-market mechanisms, observe non-carbon benefits, share benefits equitably, include meaningful participation of indigenous peoples, and recognize the importance of the traditional ecological knowledge that has maintained forests and biodiversity for generations. Based on the results of these reports by indigenous groups and peer-reviewed literature on the subject, we proceed to outline the key elements for an alternative vision for REDD+. These elements are collective action, a biocultural approach, a rights-based approach, and a non-market approach. While not exhaustive, these elements represent central themes drawn from indigenous reports and academic literature on REDD and indigenous peoples.

Elements of an Alternative Approach to REDD

Collective action - Collective action is a critical approach for understanding the governance of REDD. The work of Elinor Ostrom, a political scientist who won the Nobel Prize in Economics in 2009, and her colleagues demonstrate the important role of collective action in the sustainable management of common pool resources such as forests.³²³ Ostrom challenged the dominant paradigm of the “Tragedy of the Commons”, which argued that common pool resources were doomed to failure without privatization or state regulation³²⁴. Instead, through analysis of thousands of empirical case studies, Ostrom’s work demonstrated that smallholders who communicate with one another, develop their own agreements, and establish systems of monitoring and sanctioning, are likely to manage common pool resources sustainably and distribute resources in more equitable ways.³²⁵ Ostrom identified a number of design principles that are often found in successful examples of sustainable common pool resource management. These principles facilitate both social and ecological benefits and provide a broad framework for an alternative REDD+. Chhatre and Agrawal suggest that the transfer of ownership of large forest commons to local communities and payments for improved carbon storage through a program such as REDD+ can contribute to mitigation without adversely affecting livelihoods.³²⁶ Collective action is a relevant concept for an indigenous REDD+, as Article 13 of the Indigenous and Tribal People’s Convention highlights the “collective aspects” of the relationship of indigenous peoples to their lands and territories³²⁷. We recognize that indigenous territory has characteristics and meaning that are not fully represented by the terms “common property” or “communal lands”. The concept of territory is a broader concept than communal lands and captures “the total environment of the areas which the peoples concerned occupy or otherwise use.”³²⁸

³²³ Agrawal, 2001; Berkes, 2012; Ostrom, 1990

³²⁴ Hardin 1968

³²⁵ Ostrom, 2000

³²⁶ Chhatre & Agrawal, 2009

³²⁷ International Labor Organization Convention on Indigenous and Tribal Peoples, 1989, Article 13.

³²⁸ International Labor Organization Convention on Indigenous and Tribal Peoples, 1989

According to Ostrom, successful commons management requires:³²⁹

1. **Boundaries** – *Boundaries should be clearly defined and recognized.* Boundary-making can take the form of formal or informal demarcation of land or territory, and is broadly tied to the concept of land rights and tenure. Indigenous territories have only been partially recognized and many communities continue to struggle over land rights. According to the World Bank, indigenous peoples safeguard approximately 80% of the planet's biodiversity within their traditional territories, yet legally have title to less than 11% of these lands.³³⁰ Communities with nationally recognized land rights, often have only partial access to their original territory or lack control over the full range of resources on their ancestral lands – including surface, subsurface water and minerals, and genetic resources. An alternative REDD would establish and secure indigenous land and resource rights as a critical first step in the long-term protection of tropical forests and the cultural and biological diversity contained therein.
2. **Proportionality** – *Costs of management should be proportional to the benefits.* This design principle suggests that communities must receive meaningful and equitable benefits from projects such as REDD+. Proportionality is linked to the REDD+ concept of benefit sharing, and suggests that benefits should be equal to or greater than the costs of project participation. As IPs are not a homogenous group and may desire particular strategies depending on their unique geographic, socio-economic, and historical contexts, there is likely to be a wide range of activities that can strike the balance of proportionality necessary for a successful REDD+ program. It is also important to note that costs and benefits for indigenous peoples may not be limited to strictly monetary transactions, but instead involve broader socio-economic, ecological and cultural concerns. Therefore, REDD+ benefits should be distributed in a transparent and equitable manner in accordance with indigenous peoples' unique socio-economic, ecological, cultural, and spiritual values.
3. **Collective choice** – *Rules should be made by the resource users themselves.* This design principle highlights indigenous rights to self-determination, FPIC, and full and effective participation.³³¹ Therefore, the design and implementation of REDD+ in indigenous communities will not likely succeed as a top-down model, but rather must be developed by indigenous peoples based on their own systems of decision-making and governance structures. FPIC must be strictly applied and indigenous communities given the choice to opt-in or opt-out of REDD+ activities. If they choose to participate, they must be given the opportunity to participate fully and effectively, not only in monitoring and tree planting activities, but in the design, implementation and governance of REDD+ at various scales.
4. **Monitoring** – *A system must be in place to track people's behaviors.* Various tools for Measurement, Reporting and Verification (MRV) of carbon storage and sequestration are

³²⁹ Ostrom, 2000

³³⁰ World Bank, 2014

³³¹ Riamit & Tauli-Corpuz, 2012

under development for REDD+. The Cancun Agreements affirm the importance of monitoring and reporting systems for carbon at national and subnational levels, and recognize the need to monitor safeguards. Based on several workshops of organizations in REDD+ countries, Riamit and Tauli-Corpuz (2012) found that MRV tools have been developed “in anticipation of...market-based financing of REDD+” with an emphasis on the monitoring of carbon as opposed to social and environmental safeguards.³³² In addition to carbon, safeguards should also measure, report and verify on the following criteria associated with REDD:

1) Land tenure; 2) respect for human rights; 3) full and effective participation, including free, prior and informed consent; 4) customary law and governance systems on ecosystem and natural resource management; 5) traditional knowledge systems and roles in forest management; 6) traditional occupations and livelihoods; 7) benefit-sharing; 8) conflict resolution and management; and 9) gender.

It is important to note that many indigenous communities already have systems in place to actively monitor their forest boundaries.³³³ Following the over 20 indigenous organizations around the world, we suggest that REDD+ monitoring must move beyond carbon to include non-carbon aspects of REDD+, such as the social, economic, environmental and governance safeguards in more substantial ways.³³⁴

5. ***Sanctions – Individuals who break established rules must face consequences.*** These sanctions have been largely focused on strategies to penalize rule-breaking locally. However, the global nature of REDD+ demands that sanctions also operate across scales, penalizing actors nationally and internationally that violate agreed upon transparency, forest governance, or FPIC rules.
6. ***Conflict resolution mechanisms – Conflict between users should be resolved.*** Riamit and Tauli-Corpuz (2012) argue that systems of conflict resolution must be in place for the success of an expanded MRV concerned not only with carbon but also the social and ecological safeguards and non-carbon benefits of REDD+. ³³⁵ More research and discussion is needed to determine the site, form, and scope of conflict resolution mechanisms.
7. ***Minimal recognition of the right to organize – Communities must have sufficient autonomy to make decisions apart from non-local authorities.*** This design principle reflects the importance of self-determination and the right to accept or reject REDD+. It also signals the importance of indigenous autonomy in the design of a REDD+ approach appropriate to their particular needs and culture. It is critical that the rule making of

³³² Riamit & Tauli-Corpuz, 2012, p. 11

³³³ Espinoza Llanos & Feather, 2011

³³⁴ Riamit & Tauli-Corpuz, 2012, p. 11

³³⁵ Riamit & Tauli-Corpuz, 2012

indigenous peoples supersede that of non-local users. External influence or force can undermine the success of communal and/or indigenous forest management.

8. ***Nested Enterprises*** – ***Nesting of various institutions suggests that all levels of governance have an important and legitimate role to play.*** This design principle suggests that governance operates on multiple scales, particularly in management of a global problem such as climate change. Therefore, forest governance at local scales must be nested within environmental governance operating at larger scales creating a dynamic and reinforcing synergy. Currently, international and national forms of governance dominate REDD+ governance. However, decision-making about local forest governance and management must play a more central role in the governance of REDD+. In indigenous territories, REDD should be driven by traditional ecological knowledge and scaled up as necessary to national and international spheres.

In addition, according to Tauli-Corpuz and Lynge, “indigenous peoples through their representatives should have a voice and vote” on decisions that affect indigenous peoples or their territories occurring within institutions such as WB-FPCF and UN-REDD. Therefore, while all levels of governance have an important role to play in REDD+, in indigenous contexts, basic tenets gleaned from the diverse body of traditional ecological knowledges should be scaled up to shape broader rules in national and international arenas. In relation to REDD+, indigenous peoples have largely demonstrated their ability to successfully manage forest systems, and should be given the right to continue their unique forms of governance without interference from non-local users.

There are additional elements that can be added to Ostrom’s design principles of common property management in order to better align with an indigenous approach to REDD. These include a rights-based approach, a biocultural approach, and a non-market approach.

Rights-based approach: A rights-based approach suggests that the UNDRIP should guide all aspects of REDD+ and inform safeguard policies. Indigenous peoples have a right to participate in REDD+ and/or carbon markets (if they so choose), but based on FPIC they also have a right to be fully informed and to oppose participation all together. UN-REDD and World Bank documents make reference to and have incorporated aspects of UNDRIP. However, some worry that the weak language used in international REDD+ documents, as well as the non-legally binding nature of UNDRIP may diminish the effectiveness of rights-based policies in REDD+. Legally binding adherence to UNDRIP should be mandatory for operationalizing and implementing REDD+ in indigenous communities. For indigenous peoples, human rights are directly related to territory. Therefore, recognition of indigenous rights to territory and the resolution of land tenure conflicts should be a prerequisite for participation in REDD+.

Bio-cultural approach: Also critical to an indigenous REDD+ is an ecosystem-based, bio-cultural approach. This approach highlights the relationship between indigenous peoples and their environments, and the wealth of traditional ecological knowledge they have acquired over generations. It also reflects a dynamic and dialectical relationship between people and the environment. For example, many indigenous peoples recognize that human-induced

environmental damage ultimately results in harm to society. There is also a spiritual connection many indigenous peoples have to the land, which guides their land use practices. A bio-cultural approach is ecosystem-based rather than market-based.³³⁶ Forests are recognized for their social, cultural, economic and spiritual values that cannot be adequately represented in monetary terms alone. The bio-cultural approach is consistent with the indigenous concept of *Buen Vivir*, an alternative perspective for development that emphasizes living in harmony with nature. To some extent, this perspective also aligns with the work of Karl Polanyi, a Hungarian political economist and social theorist who argued that nature is a *fictitious commodity*. That is, nature was not produced for sale, but rather has social and cultural values that exist outside the preview of the market. Therefore, Polanyi concludes that nature should neither be commodified nor subjected to free market mechanisms. As we have witnessed worldwide in the opposition to REDD+, any attempt to manage nature according to the dictates of a market invariably produces resistance, particularly among indigenous peoples.

Non-market approach: A non-market approach to REDD+ recognizes the multiple values of forests beyond the economic and beyond carbon. It questions the use of global carbon markets as the main financial mechanism for protecting forest ecosystems. A non-market approach also draws attention to the important social, cultural, ecological and spiritual values of forests, and recognizes that the commodification of land and forests can lead to the loss of IPs' sovereignty, territory, and resource access.

Although the finance mechanisms for REDD+ have yet to be formally decided, the market model appears to have significant traction in international and national arenas. Nearly all mitigation strategies reflect an orientation to the market, as seen in the flexibility mechanisms of the UNFCCC, the World Bank's penchant for carbon markets in the FCPF, and the standardization of MRV and rigorous carbon calculations consistent with requirements for a future market.³³⁷ Alternatively, a non-market approach would not support carbon markets for forest-based mitigation initiatives such as REDD+.

As discussed previously, there have been numerous critiques of a market-based approach to climate change mitigation. The EU ETS and CDM have experienced wild volatility, which significantly reduced carbon trading and therefore emission reductions. In addition, markets disproportionately favor those with greater access and power in the market and often produce an uneven distribution of benefits.³³⁸ Furthermore, markets for REDD+ would likely target land uses with the lowest opportunity costs which, when based on financial calculations, is invariably subsistence use. This last point raises questions regarding how REDD+ may affect rural livelihoods, the ability of forest-dwellers to continue practicing subsistence agriculture, and the future of local food security.

Various actors and indigenous peoples have expressed concern about markets for REDD+. COICA warns that existing carbon markets are volatile, susceptible to speculation and market

³³⁶ IPCC, 2013

³³⁷ Riamit & Tauli-Corpuz, 2012

³³⁸ Bumpus & Liverman, 2008

“bubbles”, and are generally too risky to be relied upon as the principal mechanism for facilitating mitigation. A 2007 proposal on the Forest Retention Incentives Schemes by the Government of Tuvalu suggests that financing be based on voluntary state and corporate contributions and international climate funds. The proposal makes clear that market mechanisms are to be avoided, stating “quarantining the Scheme from carbon trading may remove some of the incentives to fraud the system or to gain carbon credits where no real and long-term climate benefits are achieved.” In sum, an alternative indigenous approach to REDD+ will require funding sources that are not linked to international carbon markets.

While both carbon markets and voluntary funds have been proposed as possible long term finance mechanisms, permanent finance for REDD+ has yet to be decided. Existing forest-based carbon projects are largely financed through the voluntary market and to a lesser degree, the CDM. REDD+ pilot projects are currently supported through several funds aimed at preparing developing countries to implement REDD+ activities. The largest funds, which include Norway’s International Climate and Forest Initiative, the Amazon Fund, and World Bank funds are sourced from voluntary contributions from a small number of developed nations and provide payments for demonstrated carbon reductions. However, these funds are temporary and only support pilot projects until a more permanent fund or market for REDD+ can be established. Of these two finance mechanisms (fund and market), there has been significant traction behind the market approach.

As discussed throughout this report, the prospects of a carbon market for REDD+ has been highly controversial due to the failure of the market to produce real emission reductions, the market’s tendency towards volatility, uncertainty around offsets, and more fundamental concerns regarding the long-term implications of the commodification of nature. Although billions of dollars have been pledged for REDD+ funding, as of 2012 only \$486 million had been disbursed.³³⁹ The long-term financial support for REDD activities is still in question.

In light of these concerns, we propose economy-wide carbon taxes in industrialized countries, which could generate ongoing revenue for REDD+ activities. Carbon taxes have been met with some political resistance based on arguments about cost burdens and impacts on the economy. However, all emission reductions have a cost and somewhere along the commodity chain someone will pay, whether the producer or the consumer in a carbon-intensive economy. As fossil fuel emissions impose economic, environmental and health burdens on society, based on the *polluter pay’s principle* the onus to bear the costs of mitigation is on the polluter.³⁴⁰ Taxes can offer an effective, low cost mechanism for climate abatement, especially if tax revenues are returned to the economy.

Some argue that taxes provide a broader policy that is “more effective and less invasive than the regulatory approach that the federal (U.S) government has pursued thus far.”³⁴¹ Carbon taxes have gained traction with some governments, which have implemented carbon taxes on a variety of fossil fuel emission sources. Jurisdictions with some form of carbon tax include

³³⁹ Schalatek et al., 2012

³⁴⁰ Hsu & Bauman, 2012

³⁴¹ Mankiw, 2013

Costa Rica, Ireland, UK, Switzerland, the Netherlands, Denmark, Norway, Sweden, Finland, India, Quebec and British Columbia (Canada) (see Figure 3). These funds have been used for renewable and cleaner energy, forest protection and conservation, and government revenue. In some cases such as Ireland, funds have been returned to low-income families to offset the financial burden of the carbon tax. In 2013, the Sanders-Boxer “Climate Protection Act” to reduce U.S emissions through an economy-wide carbon tax was introduced in the Senate. By targeting the country’s largest emitters and pricing carbon dioxide initially at \$20 per ton with gradual increases over 10 years to \$33, the proposal aims to reduce emissions to 80% below 2005 levels by 2020. The bill estimates total revenue of \$1.2 trillion over 10 years, and proposes a fee and dividend³⁴² mechanism in which a portion of the collected tax would be returned to the public. In fact, 60% of the tax revenue would be returned through rebates to consumers likely to be affected by higher prices. The rest would support energy efficiency, renewable energy, and work training programs to transition labor toward a more sustainable economy. While this would be a significant milestone on climate action in the U.S., as currently written the Act would not provide support for REDD+ in the developing world.

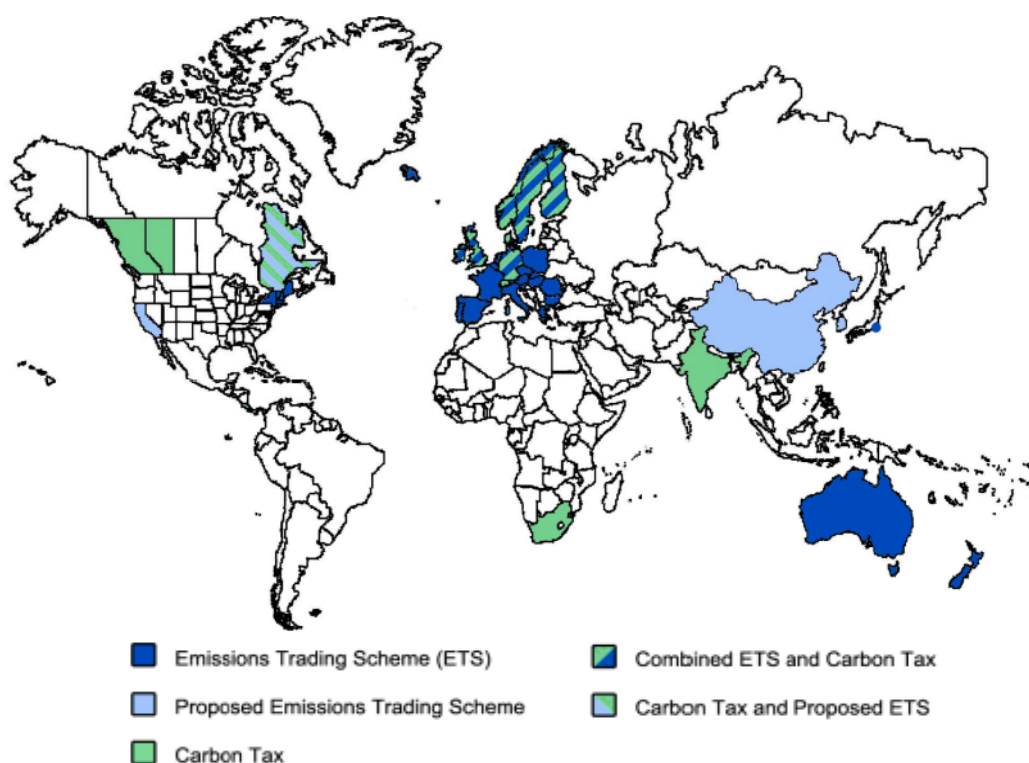


Figure 3: Map of countries, states, and provinces with existing or proposed carbon markets and/or carbon taxes. Jurisdictions with some form of carbon tax include Costa Rica, Ireland, UK, Switzerland, the Netherlands, Denmark, Norway, Sweden, Finland, India, Quebec and British Columbia (Canada). Source: Environmental and Energy Study Institute (<http://www.eesi.org/papers/view/fact-sheet-carbon-pricing-around-the-world>)

³⁴² A Carbon Fee and Dividend approach involves a carbon fee or tax on carbon dioxide assessed at the fuel source. The fee is collected at point of sale, and returned to citizens as a dividend to reduce the fee’s burden, particularly to low income citizens. Carbon tax burdens can also be alleviated through reductions in personal income taxes. Carbon taxes can facilitate the transition toward energy saving and low emission technologies.

Recent action taken in the U.S. to address REDD+ through loans may provide negligible benefits to indigenous peoples. USAID has recently partnered with Althelia Climate Fund, which is a private sector fund for REDD+ and sustainable land use activities. USAID has agreed to lend up to \$133.8 million dollars to the fund, which will provide commercial loans to businesses in developing countries practicing sustainable land use, agroforestry and/or ecotourism. Speaking on behalf of USAID, John Kerry argued that entrepreneurs would benefit from the income from their business and be eligible to earn carbon credits that can be sold on the voluntary carbon market. This entrepreneurial model puts the costs of carbon reductions onto developing country business actors, and is not likely to benefit indigenous and forest-dependent peoples who rely on forests largely for subsistence needs, as activities must generate income in order to ensure loan repayment. Alternatively, a carbon tax might be more effective in generating the ongoing funding necessary for REDD+ activities that operate outside of a business model (see Figure 4).

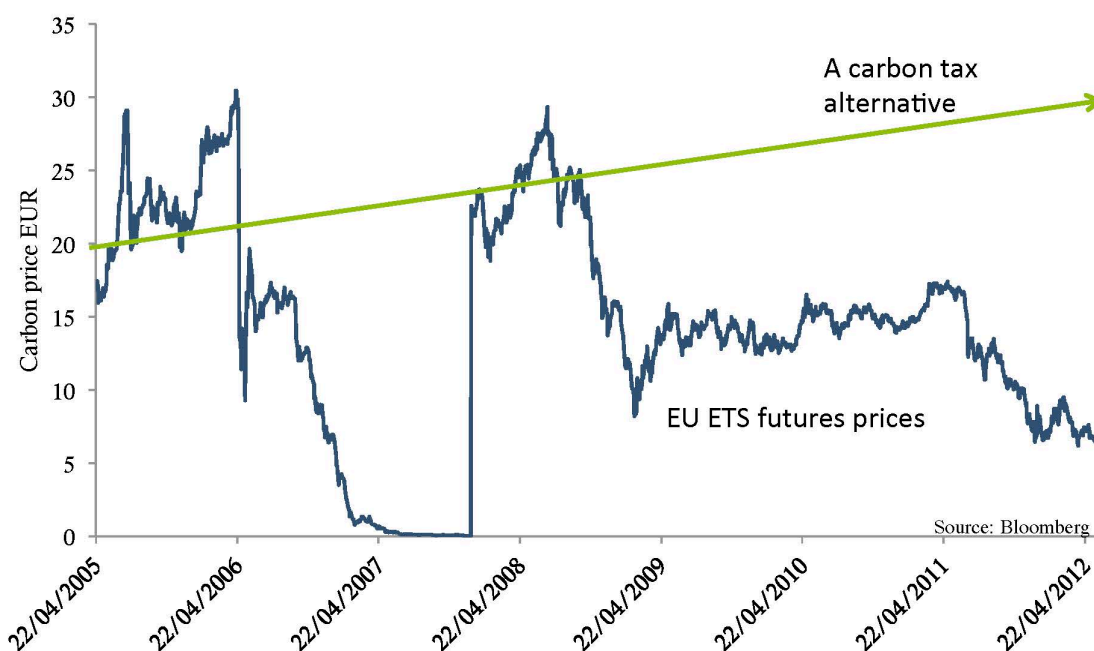


Figure 4: Carbon Tax vs. EUETS Carbon Price. A carbon tax exhibits less volatility than a market and could generate ongoing support for renewable energy and REDD+. Source: Dr. Dieter Helm, October 2012.

According to Resources for the Future, results from a U.S. federal interagency assessment suggest that a tax of \$25/tCO₂ on all carbon emissions would generate \$125 billion annually if applied to all carbon emissions in the U.S alone³⁴³. This would produce more than a trillion dollars over 10 years. These funds could be used to subsidize renewable energy in the U.S and abroad, reduce the burden on low-income families that are likely to be disproportionately affected by the carbon tax (Fee and Dividend approach), and fund REDD+ activities in

³⁴³ This would raise gasoline prices \$0.22 per gallon

developing countries. Carbon taxes are also administratively simpler and more cost-effective to implement compared to both regulation and cap and trade.³⁴⁴ In essence, carbon taxes offer an “eminently sensible” solution to climate change.³⁴⁵

During a recent meeting with finance ministers, leaders from the IMF, World Bank and UN expressed the importance of putting a price on carbon (including through a carbon tax) as a key strategy to reducing greenhouse gas emissions. Managing director of the International Monetary Fund, Christine Lagarde, said: “Carbon taxes and removing fossil fuel subsidies are ‘intelligent’ ways to reallocate resources to benefit the environment.”³⁴⁶ Carbon taxes may be the ideal financial mechanism to support the UN Green Climate Fund for mitigation and adaptation in the developing world.

Following this logic and the work of many scholars,³⁴⁷ we suggest an economy-wide carbon tax in industrialized countries, the funds of which could provide support for the UN Green Climate Fund. A portion of this fund, perhaps equivalent to the percentage of emissions from deforestation and degradation, could go toward REDD+ activities. The Ad hoc Working Group for Long-Term Cooperative Action (AWG-LCA) under the UNFCCC in 2009 proposed establishing a REDD+ window within the Green Climate Fund to support and finance all phases of REDD+; this approach is advocated by numerous environmental groups such as Greenpeace.

This fund-based paradigm requires a new approach to REDD+. Outside of a market mechanism, REDD is no longer offset-based involving the issuing of carbon credits. This effectively releases REDD+ from the trap of endless resources going toward rigorous systems of MRV, the challenges and potential political influence involved in setting baselines for REDD, and problems associated with additionality and international leakage (emissions reduced in one country being released in another). This version of REDD is distinct from existing “compensated reduction” approaches where payments are activity or performance based, and tied to rigorously measured carbon reductions. Instead, a REDD fund could support an extended version of Compensated Successful Efforts (CSE)³⁴⁸, which would fund not only the implementation of domestic policies (at various jurisdictional scales) that reduce deforestation but also efforts that reduce forest degradation, and promote sustainable forest management and conservation as exhibited within many indigenous communities. These policies might include agriculture interventions in beef and soy supply chains as well as the expansion of protected areas and indigenous territories, which reduced deforestation significantly in the Brazilian Amazon³⁴⁹. Demonstration of successful efforts (policies, programs, land-use practices) qualifies actors for new rounds of funding. Unlike the

³⁴⁴ Hsu & Bauman, 2012

³⁴⁵ Mankiw, 2009

³⁴⁶ Volcovici, 2014

³⁴⁷ Hsu & Bauman, 2012; Mankiw, 2009; Nordhaus, 2008

³⁴⁸ The Compensated Successful Efforts (CSE) model proposed by Combes Motel et al (2009) recognizes the structural causes of deforestation and therefore advocates for policy changes supporting avoided deforestation. Due to the lack of data and knowledge about the structural causes of forest degradation, this aspect of REDD is not addressed (Combes Motel et al., 2009; Tacconi, 2009).

³⁴⁹ Nepstad et al., 2014

“compensated reductions” approach, this extended version of CSE (we might call *CSE+* includes policies for reducing forest degradation and advancing indigenous territorial rights, common property management, and conservation), targets economic drivers of deforestation such as agricultural expansion as well as rewards indigenous peoples for their long history and continued practices of forest stewardship.

Conclusion



This report has drawn on academic literature and reports from NGOs and indigenous organizations to understand the critical issues pertaining to indigenous peoples with regards to REDD+, and proposes an alternative vision for climate change mitigation in forests. What has been clear from the research and review of this literature is that indigenous peoples have been among the most successful stewards of forest ecosystems. While this report recognizes that IPs are a unique and diverse group, they generally manage resources based on their particular cosmovisions and systems of traditional ecological knowledge, which represent a more holistic and integrated view of human-environment interactions than conventional resource management. Nature is valued for its multiple attributes, not solely the economic. This bio-cultural approach is critical for establishing a sustainable REDD program that avoids producing perverse outcomes for forest communities and ecosystems. A bio-cultural approach is ecosystem-based as opposed to market-based and therefore supports a non-market approach to reducing emissions from deforestation and forest degradation.

The rights and meaningful participation of IPs are paramount for the design and implementation of an alternative REDD program. To date, IPs have not been centrally involved in REDD+ negotiations, however, many indigenous groups are working to change this. In addition to the approaches discussed in the previous section (collective action, rights-

based, biocultural, and non-market approaches), an alternative REDD+ must include the meaningful participation of IPs and fully respect their rights under UNDRIP. Drawing in part on the work of De la Fuentes and Hajjar, we recommend the following specific policies be used to guide an alternative REDD+ approach that is attentive to the rights of indigenous peoples. This list is not exhaustive, but nonetheless describes critical elements for an indigenous REDD. An alternative REDD must:

- 1) Strictly follow principles articulated in UNDRIP.*
- 2) Involve the central and meaningful participation of IPs in REDD+ negotiations and program/project implementation.*
- 3) Clarify, establish, and extend land tenure and territorial rights for indigenous peoples.*
- 4) Target main drivers of deforestation and degradation, which have been largely associated with commercial land uses in agriculture (e.g. soy and cattle) and timber extraction, particularly in Latin America.*
- 5) Reward IPs for stewardship and history of sustainable forest management.*
- 6) Require FPIC and ensure that IPs have the right to accept or refuse participation in REDD+.*
- 7) Establish equitable and transparent benefits sharing.*
- 8) Monitor and evaluate social and ecological impacts of REDD+.*
- 9) Use a bio-cultural approach that emphasizes the social, cultural, ecological and sacred values of forests.*
- 10) Finance REDD+ through a carbon tax that supports a global fund for successful mitigation efforts and policies in forests.*

It is clear that both the diversity of forest peoples and the variety of REDD+ project designs mean that REDD+ must be considered on a case-by-case basis. History justifies IPs' cautious stance towards REDD+. Just as there is potential for REDD+ to produce important recognition of indigenous rights and territory, and may generate compensation for forest stewardship practices, there is also the potential for REDD+ to generate unequal outcomes, tensions over property rights, inequitable distribution of benefits, and/or negative livelihood impacts affecting indigenous peoples. If additionality is a strict requirement of REDD+ programs, many indigenous peoples will be ineligible for REDD+ due to their long history as forest stewards. In short, issues of additionality, tenure, benefit-sharing, and finance – particularly the role of market mechanisms – must be clarified prior to the implementation of REDD+ in indigenous territories.

With regards to finance, this report clearly calls into question the use of market mechanisms for delivering important conservation and community development co-benefits. The gravity

of climate change and its deep interconnection with capitalism (Klein 2014³⁵⁰) demands radical shifts in our current market-oriented approaches. In the short term, we propose a carbon tax that would support a fund for successful policies and efforts that reduce and avoid forest-based emissions. In the long term, we ultimately need to work toward imagining a different future, one based on a new paradigm, which foregrounds ideas of collective action, indigenous rights and bioculturalism, and prioritizes the needs of communities over the requirements of the market. An indigenous, bio-cultural approach does just that, and must be incorporated into the design of any just and effective climate change mitigation strategy for forests.

³⁵⁰ Klein 2014

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