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The “Right” REDD Framework: National Laws that Best Protect Indigenous Rights in a Global REDD Regime

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NOTES

THE “RIGHT” REDD FRAMEWORK: NATIONAL LAWS THAT BEST PROTECT INDIGENOUS RIGHTS IN A GLOBAL REDD REGIME

*Stephanie Baez**

This Note focuses on Reducing Emissions from Deforestation and Forest Degradation (REDD), an international framework that aims to curb carbon emissions by reducing deforestation. While international negotiators discuss the environmental benefits of REDD, which will likely be implemented in the Kyoto Protocol’s post-2012 commitment period, forest-dwelling indigenous communities worry that REDD will destroy their livelihoods. Countries with high deforestation rates, such as Brazil and Indonesia, have already implemented a number of voluntary REDD pilot projects and are currently creating legal frameworks to address the complexities of REDD. This Note compares the legal frameworks of Brazil and Indonesia in terms of how well they protect indigenous rights. Ultimately, the lives of indigenous peoples will be most affected by national laws that govern the implementation of REDD. Accordingly, this Note provides suggestions on how to build a legal framework that capitalizes on the environmental and economic benefits of REDD while protecting the rights and livelihood of indigenous peoples.

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INTRODUCTION

When the roof over his home in Amazonas, Brazil, sprung a leak, Antonio Alves ventured into the 1.57 million square kilometers¹ of forest around him to gather wood.² Instead of finding material to fix the leak, Alves found the Green Police,³ a group of local law enforcement officials hired by General Motors, American Electric Power, and Chevron.⁴ Together these corporations spent \$18 million to purchase the carbon dioxide sequestered inside 202 square kilometers of the Amazon forest.⁵ Hoping forest conservation will allow them to offset their own emissions and make money on the carbon market, the companies created forest reserves and hired the Green Police to protect their investments. “[I]f you’re not clear-cutting forest, just cutting three or four trees to build a house, I don’t think it’s a crime,” said Alves, who ended up with a gun to his neck as he tried to cut one tree.⁶ “They think it is.”⁷ After spending eleven days in jail, Alves eventually moved to avoid further harassment by the Green Police.⁸

Alves is not alone. As science and economics convince international policymakers that forest protection will play a crucial role in the reduction of global greenhouse gas (GHG) emissions,⁹ indigenous peoples across the globe are being bound by land-use restrictions in forests they have

1. See Virgilio M. Viana, *Seeing REDD in the Amazon: A Win for People, Trees and Climate*, INT’L INST. FOR ENV’T AND DEV., Mar. 2009, at 1.

2. See *Transcript, Frontline World: The Carbon Hunters*, PBS, available at <http://www.pbs.org/frontlineworld/stories/carbonwatch/2009/05/the-carbon-hunters-transcript-credits.html> (transcript of PBS television broadcast of May 11, 2010).

3. *Id.*; see also *Conservation Projects Displace Locals*, MARKETPLACE: AMERICAN PUBLIC MEDIA (Feb. 26, 2010), <http://marketplace.publicradio.org/display/web/2010/02/26/pm-brazil-two/> (noting that while the “Green Police,” or *Força Verde*, are hired to ensure that land developers and poachers do not cut down trees or otherwise destroy the ecosystem, forest-dwelling people protest that they are unfairly prevented from using forest resources).

4. See Mark Schapiro, *GM’s Money Trees*, MOTHER JONES, Nov.–Dec. 2009, at 61–62.

5. See *id.* (noting that the companies purchased 50,000 acres, which is equivalent to 202 square kilometers).

6. *Transcript, supra* note 2.

7. *Id.*

8. *Id.*

9. The world currently emits forty gigatons of carbon dioxide (CO₂) each year, causing the atmosphere to contain 425 parts per million (ppm) of GHGs. In order to avoid dangerous levels of CO₂, many scientists recommend that the atmospheric concentration of GHGs be stabilized at 450 ppm. To achieve this, global CO₂ emissions should be reduced to five gigatons per year. See generally *Climate Change 2007: Synthesis Report*, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (2007), http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf [hereinafter *Climate Change 2007*] (suggesting that if major climate catastrophes are to be avoided, CO₂ emissions should peak within the next ten to twenty years, and then begin to decline); *Climate Change “Can Be Tackled,”* BBC (May 4, 2007) <http://news.bbc.co.uk/2/hi/science/nature/6620909.stm> (noting that CO₂ stabilization at 450 ppm would prevent the world’s average temperature from increasing more than two degrees Celsius, which would be a dangerous temperature rise). The most cost-effective way to curb emissions is through avoided deforestation projects, such as REDD. For elaboration on the economic impact of avoided deforestation, see JOHN ELIASCH, CLIMATE CHANGE: FINANCING GLOBAL FORESTS: THE ELIASCH REVIEW (2008) and NICHOLAS STERN, THE ECONOMICS OF CLIMATE CHANGE: THE STERN REVIEW (2007).

traditionally considered home.¹⁰ The most developed method of forest conservation is Reducing Emissions from Deforestation and Forest Degradation (REDD), which allows governments and private companies to offset their own carbon emissions by paying to keep forests standing, and, in effect, purchasing the carbon that is stored inside.¹¹

While the forest carbon market is growing exponentially, many indigenous groups fear that they will not see the benefits of REDD, and may actually be harmed, by it.¹² For the indigenous, trees do much more than store carbon; they provide food, shelter, and livelihood.¹³ Deforestation can also be an essential part of indigenous income, as agricultural expansion, logging activities, and infrastructure creation all contribute to the economic well-being of forest-dwelling peoples.¹⁴ Although REDD has positive environmental goals, indigenous groups are concerned that these goals will be achieved at the expense of their livelihood, while allowing developed nations to continue “business as usual.”¹⁵ In order to ensure that indigenous peoples can co-exist with REDD, avoided deforestation programs must protect indigenous rights to self-determination, informed consent, and property.¹⁶

This Note focuses on the impact that national legal frameworks will have on rights protection in a global REDD regime. Regardless of international REDD agreements, the lives of indigenous peoples will be most directly influenced by the national laws that regulate forest governance.¹⁷ After explaining the background of REDD and indigenous rights in Part I, this Note compares the legal frameworks of two countries with the world’s highest deforestation rates—Brazil and Indonesia—in terms of how their

10. See Nicholas Anderson, *REDDY or Not? The Effects on Indigenous Peoples in Brazil of a Global Mechanism for Reducing Emissions from Deforestation and Degradation*, 2 J. SUSTAINABLE DEV. 18 (2009) (detailing how REDD has prevented indigenous peoples from using forests for traditional practices). See generally Tom Griffiths, *Seeing ‘REDD’? Forests, Climate Change Mitigation and the Rights of Indigenous Peoples and Local Communities*, FOREST PEOPLES PROGRAMME (May 2009), http://www.rightsandresources.org/documents/files/doc_923.pdf (explaining how REDD programs preclude indigenous peoples from using forests for economic purposes).

11. See John Vidal, *Q&A: Reducing Emissions from Deforestation and Forest Degradation (REDD)*, GUARDIAN (Sept. 24, 2009), <http://www.guardian.co.uk/environment/2009/sep/24/redd-reducing-emissions-from-deforestation>.

12. See generally Griffiths, *supra* note 10 (noting that indigenous groups have not been able to participate in the decision-making stages of REDD).

13. See Viana, *supra* note 1.

14. See *id.*; see also Sheila Wertz-Kanounnikoff et al., *Reducing Forest Emissions in the Amazon Basin: A Review of Drivers of Land-Use Change and How Payments for Environmental Services (PES) Schemes Can Affect Them* 7–9 (Ctr. for Int’l Forestry Research, Working Paper No. 40, 2008), available at http://www.cifor.org/publications/pdf_files/WPapers/WP40Wertz-Kanounnikoff.pdf.

15. Griffiths, *supra* note 10, at 21.

16. See, e.g., Kathleen Lawlor & David Huberman, *Reduced Emissions from Deforestation and Forest Degradation (REDD) and Human Rights*, in RIGHTS BASED APPROACHES: EXPLORING ISSUES AND OPPORTUNITIES FOR CONSERVATION 269, 281–82 (Jessica Campese et al. eds., 2009).

17. See Alejandro Iza, *Foreword to JOHN COSTENBADER, LEGAL FRAMEWORKS FOR REDD: DESIGN AND IMPLEMENTATION AT THE NATIONAL LEVEL* ix, ix (John Costenbader ed., 2009) (noting that national legal clarity is essential to a successful REDD program).

national REDD regulations affect indigenous populations. Part III then argues that a national legal framework which clearly defines forest governance—including carbon property rights, REDD financing, and benefits distribution—should be implemented in any country that adopts REDD programs. Lastly, this Note closes by making recommendations for a legal framework that best protects indigenous rights to property, informed consent, and self-determination.

I. REDDY OR NOT: REDD’S SUDDEN PROMINENCE AND HOW IT IMPACTS INDIGENOUS PEOPLES

In November of 2009, one week before the 15th Conference of the Parties of the United Nations Framework Convention on Climate Change (COP-15) gathered in Copenhagen to discuss the future of the Kyoto Protocol,¹⁸ the summit was hailed as “the most important [international meeting] since World War II.”¹⁹ COP-15 was expected to yield an international agreement on the successor to the Kyoto Protocol, which will expire in 2012.²⁰ Ratified by 193 parties,²¹ the Kyoto Protocol sets mandatory limits on the production of six greenhouse gases, and demonstrates the “near universal recognition of the seriousness of . . . climate change . . . for the future of the world.”²² COP-15 is generally regarded as a failure because the parties did not agree on binding commitments for the reduction of GHG levels in the post-2012 commitment

18. The Conference of the Parties (COP) is a yearly gathering of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), the primary international agreement to mitigate climate change. See U.N. Framework Convention on Climate Change, art. 7, May 9, 1992, 1771 U.N.T.S. 107. The UNFCCC is a framework treaty that is meant to be adapted over time in light of new information. During each annual COP summit, international negotiators discuss potential amendments. See, e.g., *Convention Bodies*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/essential_background/convention/convention_bodies/items/2629.php (last visited Oct. 20, 2011).

19. Lara Lázaro, *Climate Change Talks: Breakdown in Copenhagen: Next Stop, Mexico 2010 (COP 16)*, ELCANO ROYAL INSTITUTE (Sept. 3, 2010), <http://www.isn.ethz.ch/isn/Digital-Library/Publications/Detail/?size320=50&ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=122367>.

20. The first commitment period of the Kyoto Protocol began on January 1, 2008 and will end on December 31, 2012. See Daniel Bodansky, *W[h]ither the Kyoto Protocol? Durban and Beyond*, HARVARD PROJECT ON CLIMATE AGREEMENTS, 1 (Aug. 2011), http://belfercenter.ksg.harvard.edu/files/Bodansky_Viewpoint-Final.pdf. For a subsequent commitment period to begin on January 1, 2013, amendments to the Protocol must enter into force on or before that date. See 3rd Conference of the Parties to the United Nations Framework Convention on Climate Change, Kyoto, Japan, Dec. 1–10, 1997, *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, ¶ 3.7, U.N. DOC. FCCC/CP/1997/7, Dec. 10, 1997 [hereinafter *Kyoto Protocol*].

21. See *Status of Ratification of the Kyoto Protocol*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php (last visited Oct. 20, 2011).

22. Richard L. Ottinger, *Introduction: Copenhagen Climate Change Conference—Success or Failure?*, 27 PACE ENVTL. L. REV. 411, 412–13 (2010); see also *Kyoto Protocol*, *supra* note 20, ¶ 3.1 (establishing a framework for developed nations to “reduc[e] their overall emissions of [greenhouse] gases by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012”).

period.²³ They did, however, agree that emissions reduction credits for avoided deforestation (REDD) projects will be included in the post-Kyoto protocol.²⁴ Although the Copenhagen Accord is neither binding nor specific, it shifted the debate from *if* to *how* REDD will be implemented.²⁵

This Part provides background on REDD, focusing on its environmental and social impacts. It first explores the environmental benefits of forest protection, and then traces the history of REDD in international agreements. Part I.C. highlights the numerous policy uncertainties that still exist in REDD implementation, and finally, Part I.D. analyzes REDD and indigenous rights, looking at the potential risks and rewards REDD could bestow upon indigenous communities.

A. *The Role of Forests in Curbing Climate Change*

According to the United Nations Framework Convention on Climate Change (UNFCCC), climate change occurs when the composition of the global atmosphere is altered, either directly or indirectly, by human activity.²⁶ Power generation, deforestation, transportation, and agriculture all produce greenhouse gases—such as carbon dioxide—that cause temperatures to rise across the globe.²⁷ Because climate change is “intricately intertwined with . . . population growth, desertification and land degradation, air and water pollution [and] loss of biodiversity,” it has been identified as an international crisis.²⁸

The consequences of climate change are especially severe for indigenous peoples, who are among the poorest and most marginalized in the world, and often also live in areas most affected by rising temperature.²⁹ Because their livelihoods frequently depend upon land use and natural resources,

23. See generally Daniel Bodansky, *The Copenhagen Climate Change Conference: A Postmortem*, 104 AM. J. INT'L L. 230, 240 (2010).

24. See 15th Conference of the Parties to the United Nations Framework Convention on Climate Change, Copenhagen, Den., Dec. 7–18, 2009, *Copenhagen Accord*, ¶ 6 U.N. DOC. FCCC/CP/2009/L.7 (Dec. 18, 2009) [hereinafter *Copenhagen Accord*] (“We recognize the crucial role of reducing emissions from deforestation and forest degradation and the need to enhance removals of greenhouse gas emission by forests and agree on the need to provide positive incentives to such actions through the immediate establishment of a mechanism including REDD-plus, to enable the mobilization of financial resources from developed countries.”).

25. Ottinger, *supra* note 22, at 417 (noting that “[o]ne of the most important accomplishments” of COP-15 was an agreement on the architecture and funding of REDD).

26. *Climate Change Glossary*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/files/documentation/text/html/list_search.php?what=keywords&val=&valan=a&anf=0&id=10 (last visited Oct. 20, 2011).

27. See, e.g., LENNY BERNSTEIN ET AL., INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *CLIMATE CHANGE 2007: SYNTHESIS REPORT 5* (2008).

28. Charlotte Streck et al., *Climate Change and Forestry: An Introduction*, in *CLIMATE CHANGE AND FORESTS: EMERGING POLICY AND MARKET OPPORTUNITIES* 3, 3 (Charlotte Streck ed., 2008).

29. See Annelie Fincke, *Indigenous Peoples and REDD-plus: Challenges and Opportunities for the Engagement of Indigenous Peoples and Local Communities in REDD-plus*, INT'L UNION FOR CONSERVATION OF NATURE, 2 (June 2010), http://cmsdata.iucn.org/downloads/iucn_briefing_ips_and_redd_aug_2010_summary.pdf.

indigenous groups are at great risk as climate change depletes resources and pushes them from their traditional homes.³⁰

To combat climate change, the international community has principally focused on reducing the amount of carbon dioxide that is released into the atmosphere by industrial and energy sectors.³¹ The focus is now shifting to the reduction of forest carbon emissions,³² however, as it is recognized that deforestation is a major contributor to climate change.³³ The Intergovernmental Panel on Climate Change (IPCC), a United Nations body containing over 2,000 scientists who analyze evidence on climate change, estimates that the forestry sector is responsible for 17.4 percent of global GHG emissions, placing it above the transportation and industry sectors, which account for 14 percent of global emissions each.³⁴

Forests are the world’s most important terrestrial carbon “sink,” or storehouse of carbon.³⁵ The Earth’s carbon naturally cycles through four main sinks: geological, oceanic, terrestrial, and atmospheric.³⁶ One “goal of climate change initiatives” is to “reduce the amount of carbon in the atmospheric store and increase the amount that is sequestered in one of the other three reservoirs.”³⁷ Forests remove carbon from the atmosphere and sequester it in their biomass and soils, which contain approximately 60 percent of the carbon that is stored in terrestrial sinks.³⁸

When a forest is destroyed (for example, cut down for timber or burned), the harmful effects are twofold: not only is the carbon sequestered in each tree released into the atmosphere, but also the remaining forest’s capacity to absorb carbon from the atmosphere is diminished.³⁹ As a result, deforestation, which is the “permanent removal of forest cover,” contributes significantly to global carbon dioxide emissions.⁴⁰ In fact, in “2002 [the] rate of forest loss in Brazil and Indonesia alone . . . produced four-fifths as

30. *See id.*

31. *See* Streck et al., *supra* note 28, at 3–4.

32. *See id.* at 4.

33. *Seeing the Wood: Special Report: Forests*, ECONOMIST, Sept. 25, 2010, at 3–6.

34. *See Climate Change 2007, supra* note 9; *see also* Daniel Howden, *Deforestation: The Hidden Cause of Global Warming*, INDEP. (May 2007) <http://www.independent.co.uk/environment/climate-change/deforestation-the-hidden-cause-of-global-warming-448734.html> (noting that in a 24-hour period, deforestation emits the same amount of carbon as 8 million people flying from New York to London).

35. Dennis D. Hirsch, *Trading in Ecosystem Services: Carbon Sinks and the Clean Development Mechanism*, 22 J. LAND USE & ENVTL. L. 623, 628 (2007) (defining a carbon sink as “a process, activity, or mechanism that removes GHG . . . from the atmosphere and then stores them”).

36. *See id.*

37. *Id.*

38. Jiarui Dong et al., *Remote Sensing Estimates of Boreal and Temperate Forest Woody Biomass: Carbon Pools, Sources, and Sinks*, 84 REMOTE SENSING OF ENV’T 393, 393 (2003).

39. *See generally* G. Bala et al., *Combined Climate and Carbon-Cycle Effects of Large-Scale Deforestation*, 104 PROC. NAT’L ACAD. SCI. 6550 (2007).

40. Ross Andrew Clarke, *Moving the REDD Debate from Theory to Practice: Lessons Learned from the ULU Masen Project*, 6 LAW ENV’T & DEV. J. 36, 39 (2010) (explaining the harmful effects of forest degradation, as well as deforestation, and defining “forest degradation” as “gradual changes that negatively affect forest production capacity”).

many greenhouse gases as the Annex I [developed]⁴¹ countries committed to reduce that year under the Kyoto Protocol.”⁴²

Because forests are immense carbon sinks, many scientists and policymakers alike agree that they should play an important role in curbing climate change.⁴³ REDD is the best-developed international proposal for forest conservation. Part I.B. traces the history of REDD, which is expected to be a legally binding part of the post-2012 successor to the Kyoto Protocol. Currently, REDD exists solely as a series of pilot projects that are guided by non-binding international agreements. Beginning with the Kyoto Protocol, Part I.B. discusses the inclusion—or exclusion—of REDD in international climate change legislation and explains how REDD proposals have changed over time, ending with the projection of a legally binding global REDD regime.

B. The Road to REDD

Despite the recognized link between deforestation and climate change, avoided deforestation projects were excluded from the Kyoto Protocol's 2008–12 commitment period, in large part because of practical concerns.⁴⁴ Due to the difficulties of monitoring and verifying carbon emissions that are reduced from avoided deforestation, negotiators decided to limit the inclusion of forestry projects in the Kyoto Protocol to afforestation—the planting of trees on land that was not previously forested—and reforestation, which refers to recently cleared forestland.⁴⁵

Avoided deforestation became a key part of international discussions in 2005, when the Coalition of Rainforest Nations (CfRN), led by Costa Rica and Papua New Guinea, proposed “RED” at COP-11 in Montreal.⁴⁶

41. According to the UNFCCC, Annex I nations “include the industrialized countries that were members of the OECD (Organisation for Economic Co-operation and Development) in 1992, plus countries with economies in transition (the EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States.” *Parties and Observers*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/parties_and_observers/items/2704.php (last visited Oct. 20, 2011). Annex I nations are the only countries bound by mandatory carbon emission reduction targets under the Kyoto Protocol. *Id.*

42. Michael L. Brown, Note, *Limiting Corrupt Incentives in a Global REDD Regime*, 37 *ECOLOGY L.Q.* 237, 239 (2010); see also David Takacs, *Carbon into Gold: Forest Carbon Offsets, Climate Change Adaptation, and International Law*, 15 *HASTINGS W.-NW. J. ENVTL. L. & POL'Y* 39, 56 (2009).

43. See *supra* note 9 and accompanying text.

44. See Frances Seymour, *Forests, Climate Change, and Human Rights: Managing Risk and Trade-offs*, *CTR. FOR INT'L FORESTRY RESEARCH*, 6 (Oct. 2008), <http://www.cbd.int/doc/meetings/tk/redd-ilc-01/other/redd-ilc-01-cifor-en.pdf>; see also David Freestone, *Foreword*, in *CLIMATE CHANGE AND FORESTS*, *supra* note 28, at ix, x (noting that avoided deforestation was kept out of international climate change discussions for political and methodological reasons, including disagreements among Annex I nations and difficulties with emissions leakage and additionality).

45. See ROSS W. GORTE & JONATHAN L. RAMSEUR, *CONG. RESEARCH SERV.*, RL 34560, *FOREST CARBON MARKETS: POTENTIAL AND DRAWBACKS* 3 (2008).

46. 11th Conference of the Parties to the United Nations Framework Convention on Climate Change, Montreal, Can., Nov. 28–Dec. 9, 2005, *Reducing Emissions from*

Focusing solely on deforestation (not forest degradation, hence only one “D”) the CfrN called on UNFCCC parties to “take note of present rates of deforestation within developing nations, acknowledge the resulting carbon emissions, and consequently open dialogue to develop scientific, technical, policy and capacity responses to address such emissions resulting from tropical deforestation.”⁴⁷ The COP-11 parties agreed to submit CfrN’s RED proposal to the Subsidiary Body for Scientific and Technical Advice (SBSTA) for a further study on deforestation, to be reviewed at COP-12.⁴⁸

Avoided deforestation programs gained further support following the release of the *Stern Review on the Economics of Climate Change* in 2007.⁴⁹ The “most comprehensive synthesis of data concerning the economic impacts of climate change,” the *Stern Review* identifies avoided deforestation as the cheapest option for mitigating emissions of greenhouse gases.⁵⁰ In light of the environmental and economic evidence produced by the CfrN proposal and *Stern Review* findings, RED moved to the forefront of international climate change discussions.

At COP-13 in Bali, the UNFCCC parties agreed upon the “Bali Roadmap,” a timeline for the development of an international REDD proposal.⁵¹ The forward-looking Roadmap was designed to create climate change legislation beyond the Kyoto Protocol, emphasizing the importance of “long-term cooperative action” within the international community.⁵² The Bali Roadmap targeted COP-15 (the 2009 summit in Copenhagen) as the deadline for an agreement on a comprehensive post-Kyoto plan.⁵³ Additionally, the parties identified forest degradation as a major source of emissions that should be discussed in conjunction with deforestation, and specifically identified an “urgent need” to take further action with REDD implementation.⁵⁴

Deforestation in Developing Countries: Approaches to Stimulate Action, U.N. DOC. FCCC/CP/2005/L.2 (2005) [hereinafter *RED Proposal*].

47. *Id.* at *Submission by the Governments of Papua New Guinea and Costa Rica*, at 2.

48. See *Convention Bodies*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/essential_background/convention/convention_bodies/items/2629.php (last visited Oct. 20, 2011) (explaining that the SBSTA follows a specific mandate to give advice to the COP on land-use issues).

49. See generally STERN, *supra* note 9 (arguing that it is more cost-effective for developed nations to reduce carbon emissions via offsets from REDD projects than to convert their fossil-fuel-dependent economies and reduce emissions domestically).

50. Daniel Watts, *Capping Deforestation Emissions in Developing Countries Equitably and Effectively*, 8 SEATTLE J. SOC. JUST. 819, 822 (2010).

51. See 13th Conference of the Parties to the United Nations Framework Convention on Climate Change, Bali, Indon., Dec. 3–15, 2007, *Report of the Conference of the Parties on its Thirteenth Session*, U.N. DOC FCCC/CP/2007/6/Add.1 (Mar. 14, 2008) [hereinafter *Bali Roadmap*].

52. *Id.* ¶ 1.

53. See Chris Spence et al., *Great Expectations: Understanding Bali and the Climate Change Negotiations Process*, 17 REV. EUR. COMMUNITY & INT’L ENVTL. L. 142, 151 (2008).

54. *Bali Roadmap*, *supra* note 51, ¶ 1(b)(iii) (deciding that, by COP-15, the international community should develop “[p]olicy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and

Although the Bali Roadmap led to Copenhagen, COP-15 was ultimately not as successful as most had hoped.⁵⁵ Instead of developing the successor to the Kyoto Protocol, COP-15 yielded the Copenhagen Accord, a “non-binding political statement outlining principles to keep global warming to 2 degrees Celsius.”⁵⁶ In terms of REDD, the Copenhagen Accord recognizes the importance of including REDD in future legislation, calls for the “immediate establishment” of a mechanism to mobilize resources for REDD, and emphasizes the “need to provide positive incentives” to encourage REDD support.⁵⁷ The Copenhagen Accord loosely outlines a framework for “REDD-Plus”—an expanded version of REDD that would include the maintenance of forest carbon stocks as well as avoided deforestation and degradation—but does not provide concrete guidance for REDD plans.⁵⁸ Despite the vague language of the Copenhagen Accord, it ensures REDD’s place in future climate change legislation.

Following the disappointment of the Copenhagen summit, international negotiators did not have high expectations going into Cancun’s COP-16, held in December 2010.⁵⁹ Worse than reaching an impasse regarding the details of a climate change plan, the parties were unable to agree on whether the Kyoto Protocol should have a second commitment period at all.⁶⁰ After two weeks of negotiations, the parties agreed upon the Cancun Accord,⁶¹ a

the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries”).

55. See *supra* notes 23–25 and accompanying text.

56. Florence Daviet, *From Copenhagen to Cancun: Forests and REDD+*, WORLD RESEARCH INST. (Nov. 23, 2010), <http://www.wri.org/stories/2010/11/copenhagen-cancun-forests-and-redd>; see also Bodansky, *supra* note 23, at 231 (noting that objections by a small group of countries—led by Sudan, Venezuela and Bolivia—prevented the Copenhagen Conference from officially “adopting” the Accord and instead caused the Conference to take “note of” the Copenhagen Accord, leaving its future status uncertain).

57. *Copenhagen Accord*, *supra* note 24, ¶ 6.

58. Tom Griffiths notes that the change from REDD to REDD+ occurred in March 2009, and “has since been used as the official definition of REDD in the negotiating text for an agreement in Copenhagen that includes Sustainable Forest Management (SFM) and enhancement of forest carbon stocks, notably reforestation, afforestation and plantations.” Griffiths, *supra* note 10, at 5. For purposes of clarity, this Note uses REDD as a synonym for REDD+.

59. See *The United Nations Climate Conference in Cancun, COP-16*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/meetings/cop_16/items/5571.php (last visited Oct. 20, 2011); see also Lisa Friedman, *Sandy, White Beaches and a ‘Toxic’ Issue Confront Negotiators as Cancun Talks Begin*, N.Y. TIMES (Nov. 29, 2010), <http://www.nytimes.com/cwire/2010/11/29/29climatewire-sandy-white-beaches-and-a-toxic-issue-confro-40061.html?pagewanted=all> (noting that the future of the Kyoto Protocol was uncertain before the Cancun Summit, with many policymakers expecting negotiation breakdowns and mass walk-outs instead of an agreement); Gregory Hudson, *Cancun: Will COP 16 Live Up to Low Expectations?*, TRADE & ENV’T REV., Dec. 2010, at 2–16 (explaining that, after the Copenhagen Summit failed to yield a binding agreement, commentators believed that a comprehensive emissions reductions agreement at Cancun was not possible).

60. See Alister Doyle, *Kyoto Impasse Still Blocks U.N. Climate Talks: India*, REUTERS (Dec. 9, 2010, 4:45 PM), <http://www.reuters.com/article/idUSTRE6B83ZP20101209>.

61. 16th Conference of the Parties to the United Nations Framework Convention on Climate Change, Cancun, Mex., Nov. 29–Dec. 10, 2010, *Outcome of the Work of the Ad Hoc*

“brilliant” compromise that allowed each nation to get its way in some area⁶²—except Bolivia, who adamantly objected to the entire agreement⁶³—and avoided the question of a Kyoto successor altogether.⁶⁴ Although the Cancun Accord will be fully adopted, it leaves open the question of whether its measures will be legally binding.⁶⁵

Despite the disagreements surrounding the Cancun Accord, the COP-16 parties reached a consensus on REDD.⁶⁶ Regardless of whether there is a post-Kyoto agreement, the international community is committed to creating REDD legislation.⁶⁷ Building upon the REDD text that has been discussed in previous COP summits, the Cancun Accord added guidance on REDD-capacity-building measures to ensure that developing countries are able to implement REDD effectively.⁶⁸ The Accord advocates a phased approach, with three readiness phases: planning, implementation, and results-based activities.⁶⁹ To undertake REDD activities, each country must develop a national REDD plan, a national reference emission level, a national forest monitoring system, and a system to address safeguards for indigenous peoples’ rights.⁷⁰

Despite the agreement in Cancun, the international REDD text still leaves a number of unanswered questions. Key policy uncertainties include the definition of “forest,” the scope and scale of REDD activities, and REDD

Working Group on Long-Term Cooperative Action Under the Convention, U.N. DOC. FCCC/AWGLCA/2010/L.7 (2010) [hereinafter *Cancun Accord*].

62. The Cancun Accord helped close the gap between rich and poor nations, for example, by developing the Green Climate Fund to raise \$100 billion to assist poor nations with carbon emissions reductions (something that pleases poor nations), and mandating that the fund be controlled by the World Bank (at the request of rich nations, like the United States). *See, e.g.*, Lisa Friedman, *Cancun Agreement Preserves an Escape Hatch for Japan and Other Industrial Nations*, N.Y. TIMES (Dec. 17, 2010), <http://www.nytimes.com/cwire/2010/12/17/17climatewire-cancun-agreement-preserves-an-escape-hatch-f-38242.html?pagewanted=all> (interviewing Ned Helme, President of Center for Clean Air Policy, who describes the Cancun Accord as “really clever” because “[e]ach step of the way, it’s got a piece that’s taken care of each [nation’s] thing”).

63. *See Climate Change Diplomacy: Back from the Brink*, ECONOMIST, Dec. 16, 2010, at 121 (explaining that Bolivia was the sole objector to the Cancun Accord, causing the parties to hold that the “principle of consensus on which the conference runs does not give one country the right to veto the will of all the others,” and allowing the Cancun Accord to be fully adopted).

64. *See, e.g.*, Friedman, *supra* note 62 (noting that the Cancun Accord left the question of a Kyoto successor open because Japan and other industrialized countries refused to commit to mandatory emissions reductions post-2012; however, many commentators believe that by virtue of reaching an agreement, the COP-16 parties indicated that there will be a second Kyoto commitment period).

65. *See UN Climate Change Talks in Cancun Agree [to] a Deal*, BBC (Dec. 11, 2010), <http://www.bbc.co.uk/news/science-environment-11975470>.

66. *Cancun Accord*, *supra* note 61, § III.C, ¶¶ 68–79.

67. *See* Christian Schwägerl & Gerald Traufetter, *Cancun Climate Summit: Can Rainforests Be Saved with Cash Injections?*, SPIEGEL ONLINE (Dec. 7, 2010), <http://www.spiegel.de/international/world/0,1518,733270,00.html>.

68. *Cancun Accord*, *supra* note 61, § III (C), ¶ 71.

69. *Id.* § III (C), ¶ 73.

70. *Id.* § III (C), ¶ 71(a)–(d).

financing.⁷¹ Section I.C. explores how REDD pilot projects have developed in each of these areas absent international guidance.

C. REDD Realities: Differing Implementations of International Guidelines

Although the international community has agreed on the general framework for REDD, there has yet to be a “consensus proposal[] for the system’s design.”⁷² Thus, REDD remains a collection of country proposals and pilot projects, rather than a unified international plan. Existing REDD projects differ on everything from their definitions of “forest” to their methods of financing to their scales of implementation, causing scholars to note that the only shared attribute in REDD programs is a lack of clarity.⁷³ As negotiators discuss the implementation of an international REDD regime, it is important that there is consistency in key “unanswered questions.”⁷⁴ This Section highlights some of the diverse and often contradictory policy practices in existing REDD projects.

1. Definitions: What Is a “Forest”?

The UNFCCC defines “forest” as an area greater than 0.5-1 hectares (ha) in size with 10–30 percent covered by canopy consisting of trees that reach a height of at least two to five meters at maturity.⁷⁵ This definition identifies canopy cover, rather than biomass content, as the defining characteristic of a forest. UNFCCC negotiators agreed on this definition because tree crown cover is easier to monitor and measure than biomass, and “plays a vital role in biosphere and atmosphere interactions.”⁷⁶ Further, canopy cover has been an essential part of the definition of “forest” that the Food and Agricultural Organization (FAO) has used for decades, and thus has an established place in international law.⁷⁷

Critics of the UNFCCC definition argue that by not focusing on the biomass content of a forest, the definition does not differentiate between plantations and natural forests. As a result, it is possible that “natural forests that are severely degraded or converted to plantations technically remain classified as forests.”⁷⁸ Because it is possible for biomass content to

71. See *infra* Part I.C.1–4.

72. See Brown, *supra* note 42, at 259.

73. See John Costenbader, *Introduction to LEGAL FRAMEWORKS FOR REDD*, *supra* note 17, at 3, 9.

74. See Kemen Austin et al., *The REDD+ Decision in Cancun*, WORLD RES. INST. (Dec. 20, 2010), <http://wri.org/stories/2010/12/redd-decision-cancun>.

75. Nophea Sasaki & Francis E. Putz, *Critical Need for New Definitions of “Forest” and “Forest Degradation” in Global Climate Change Agreements*, CONSERVATION LETTERS, Oct. 2009, at 226, 227.

76. *Id.*

77. *Id.* (noting an important distinction between the FAO definition, which used a 40% tree crown cover to define “closed forest,” and the UNFCCC definition which “left it to each country . . . to select a minimum threshold of only 10-30%,” so a country could choose the lower number).

78. See Gavin Doyle, *Additionality and Permanence*, in LEGAL FRAMEWORKS FOR REDD, *supra* note 17, at 81, 89.

be removed from a forest without “recognition of the loss of carbon,” environmentalists worry that forestry companies could continue to collect carbon payments, even while damaging a forest’s ability to sequester carbon.⁷⁹

Because of the disagreement surrounding the UNFCCC definition of forest, many countries have codified their own definitions in national laws. For example, the Indonesian definition of forest explicitly states that tree plantations cannot be classified as forests.⁸⁰ Due to the difference in definitions, forestry projects that receive credit under the UNFCCC might not be recognized under Indonesian law.⁸¹ This inconsistency is troubling as it may distort statistics and ultimately result in a system that rewards countries for forest loss.⁸²

2. Scope: What Activities Are Included in REDD?

As avoided deforestation projects have moved from RED to REDD to REDD+, the types of activities that will be included in each scheme have changed in scope. Early discussions limited REDD to avoiding deforestation and forest degradation.⁸³ In Copenhagen, however, negotiators referenced five types of REDD activities: reducing emissions from deforestation, reducing emissions from forest degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks.⁸⁴

Ultimately the Copenhagen Accords only included three activities—avoided deforestation, avoided degradation, and conservation of carbon stocks—but a more expansive scope appeals to nations which do not have a history of deforestation or have already made significant conservation progress.⁸⁵ These nations argue that REDD should encourage positive forest changes, in addition to reducing negative ones, thereby creating more opportunities for international participation in REDD.⁸⁶ Costa Rica, for example, significantly halted deforestation between 1997 and 2005, before REDD reached the forefront of international debate.⁸⁷ Under the

79. Rhett A. Butler, *Weak Forest Definition May Undermine REDD Efforts*, MONGABAY (Aug. 20, 2009), <http://news.mongabay.com/2009/0819-forests.html>.

80. See *Background Analysis of REDD Regulatory Frameworks*, 44 (Oct. 2009), <http://www.terrestrialcarbon.org/site/DefaultSite/filesystem/documents/TCG-2009-Background-Analysis-of-REDD-Regulatory-Frameworks.pdf>.

81. See *id.*

82. See Griffiths, *supra* note 10, at 5.

83. See Sheila Wertz-Kanounnikoff, *Global REDD Negotiations: Update and Key Issues*, in REDD, FOREST GOVERNANCE AND RURAL LIVELIHOODS: THE EMERGING AGENDA 21, 23 (Oliver Springate-Baginski & Eva Wollenberg eds., 2010).

84. See Daviet, *supra* note 56.

85. *Copenhagen Accord*, *supra* note 24.

86. See Wertz-Kanounnikoff, *supra* note 83, at 23–24.

87. See Kwaw S. Andam et al., *Protected Areas and Avoided Deforestation: A Statistical Evaluation*, GLOBAL ENV’T FACILITY, 3 (Aug. 2007), <http://www.duke.edu/~asp9/files/ParksImpacts-GEFreport-AndamEtal.pdf> (“Costa Rica has one of the most widely lauded protected areas systems and is a leader in the debate to have ‘avoided deforestation’ credits recognized by the Kyoto Protocol.”).

Copenhagen proposal, Costa Rica would have minimal participation in REDD, as enhancement and sustainable management of forest carbon are not included.⁸⁸ To bypass this problem, some scholars have proposed categorizing REDD activities to allow each country to be involved with REDD on different levels.⁸⁹ Under this proposal, REDD would change the behavior of countries with high deforestation rates and reward countries that have traditionally maintained their forests, thereby alleviating any pressure they may feel to participate in deforestation in the future.

3. Scale: Is REDD Implemented on a National or Project Level?

An additional variable in REDD proposals is the scale, or “geographical level,” on which REDD accounting and distribution will take place.⁹⁰ In order to be effective, a REDD plan must accurately measure whether emissions from deforestation are actually being reduced. The REDD plan then must provide incentives such as carbon credits or community funding to reward past reductions and/or entice future efforts.⁹¹ There are three possible ways to measure and reward reduced deforestation: on the national level, the sub-national level, or through a nested approach, which is a hybrid of the first two.⁹²

a. National Approach

A majority of the country proposals submitted to the UNFCCC advocate a national scale. Under this approach, a State would establish a national reference level to determine the baseline amount of deforestation countrywide.⁹³ If, after a defined monitoring period, deforestation was reduced as compared to the national reference level, a national government agency would be rewarded with REDD payments from the international community.⁹⁴ National payments could include tradable carbon credits or money from a global climate change fund.⁹⁵

The national approach would preclude a country from receiving direct credits for emissions that are reduced on the sub-national level; however, in order to reduce total national emissions from deforestation, a government

88. *Copenhagen Accord*, *supra* note 24, ¶ 7.

89. One example of a phased approach to REDD is the following: Stage One would involve countries such as the Democratic Republic of Congo and Ghana, whose REDD programs would focus on avoiding leakage and future deforestation. *See* Wertz-Kanounnikoff, *supra* note 83, at 23–24. Stage Two countries like Indonesia and Brazil would avoid deforestation and forest degradation, while Stage Three countries such as India and Costa Rica would continue forest conservation. *Id.* Finally, Vietnam, China, and other Stage Four nations would continue afforestation and reforestation projects. *Id.*

90. *See* Arild Angelsen et al., *What is the Right Scale for REDD?*, in *MOVING AHEAD WITH REDD: ISSUES, OPTIONS AND IMPLICATIONS* 31, 31 (Arild Angelsen ed., 2008).

91. *See Summary*, in *MOVING AHEAD WITH REDD*, *supra* note 90, at viii, viii–x.

92. *See* Angelsen et al., *supra* note 90, at 31.

93. *See* John Costenbader, *Benefit Sharing*, in *LEGAL FRAMEWORKS FOR REDD*, *supra* note 17, at 57, 62.

94. *See id.*

95. *See* Angelsen et al., *supra* note 90, at 34.

could implement laws and policies to entice local communities to reduce deforestation.⁹⁶ Thus, the national approach gives the government wide discretion to implement policies that will reduce deforestation and forest degradation.⁹⁷ This could work to the advantage of indigenous peoples, since the national government would be responsible for paying for “any necessary policy and administrative reforms” as well as the monitoring and verification mechanisms, thereby reducing the financial burden of forest communities.⁹⁸ Additionally, a national approach may create laws that “align with national development strategies and bring long-term development benefits.”⁹⁹

Despite these advantages, many indigenous groups disfavor a national approach because their ability to participate in the REDD decision-making process would be severely limited.¹⁰⁰ It is unlikely that local communities would have a say in the design and implementation of national REDD policies. Further, REDD benefit sharing would probably be inequitable, with rewards piling up nationally and not trickling down to indigenous peoples.¹⁰¹ In addition, “[i]ndigenous groups are also worried that because they have historically served as guardians of forests—deforestation rates in indigenous territories are lower than in parks and unprotected areas—they won’t qualify for REDD payments, which reward activities that reduce forest clearing relative to a baseline of past deforestation.”¹⁰²

Regardless of its impact on indigenous communities, the national approach may not be feasible in poorer countries that lack the capacity to monitor deforestation adequately at the national level.¹⁰³ For these countries, a sub-national approach may be more practical.

b. Sub-national Approach

Under a sub-national, or “project-level,” approach, REDD measurements and payments would occur in a defined geographical area or project site.¹⁰⁴ REDD projects could be implemented by “individuals, communities, non-governmental organisations (NGOs), private companies or national or local governments.”¹⁰⁵

Because they occur on a smaller scale, sub-national REDD programs are easier and faster to implement than programs at the national level.

96. *See id.*

97. *See id.*

98. Costenbader, *supra* note 93, at 63.

99. *See* Angelsen et al., *supra* note 90, at 39.

100. Costenbader, *supra* note 93, at 64.

101. *See id.* (noting that adequate legal safeguards are necessary “to ensure participation and objective selection of projects, centralized national systems may favour elite, larger projects and exclude small community initiatives, raising fairness concerns and preventing benefits from reaching local and indigenous landholders”).

102. Rhet A. Butler, *Brazil’s Plan to Save the Amazon*, MONGABAY (June 2, 2009), <http://news.mongabay.com/2009/0602-brazil.html>.

103. Costenbader, *supra* note 93, at 62–63.

104. *Id.* at 62.

105. *See* Angelsen et al., *supra* note 90, at 32.

Additionally, the carbon market has already utilized the sub-national approach for various carbon-trading schemes, with relatively successful results.¹⁰⁶ It may be easier for indigenous peoples to participate in the design and implementation of REDD at the project level as well, because the projects will be controlled by community laws and governance.¹⁰⁷ On the other hand, decentralization of forest governance could “lead to increased corruption and ‘elite capture’ at local levels, as powerful groups with government connections dominate target communities.”¹⁰⁸ Another potential risk at the sub-national level is that the goal of carbon sequestration will lose priority, and practices that have traditionally benefitted the local economy—such as deforestation—will remain powerful.¹⁰⁹

c. Nested Approach

A nested, or hybrid, approach would “allow payments to go directly to projects that achieve reductions, and also to the national level if there is a proven overall reduction.”¹¹⁰ This is different from the national approach in that sub-national projects can receive direct funding, instead of being utilized simply to reduce national totals. In a nested approach, the accounting between national and sub-national level projects would need to be “harmonized” so that “any emission reduction credits issued at the sub-national level would be deducted from the national accounting.”¹¹¹

Advantages to this approach include the ability to “phase” from a nested scale to the national scale, so that developing nations that currently lack resources for a national approach can utilize REDD on a smaller scale while building capacity for a national program.¹¹² Additionally, the nested approach offers flexibility, so that smaller projects can receive benefits even if net national deforestation emissions have not been reduced.¹¹³

4. Financing

The most crucial—and hotly debated—element of an international REDD scheme is financing. The Copenhagen Accord recognizes that any successful REDD scheme must “provide positive incentives” for countries that take action to reduce deforestation and degradation.¹¹⁴ How countries would receive this money, however, is still uncertain. REDD pilot projects

106. *Id.* at 33 (noting that the Clean Development Mechanism under the Kyoto Protocol “could serve as a model for the institutional set-up” of a sub-national REDD program).

107. *See id.* at 39.

108. Costenbader, *supra* note 93, at 63.

109. *See* LAWRENCE C. CHRISTY ET AL., FOREST LAW AND SUSTAINABLE DEVELOPMENT: ADDRESSING CONTEMPORARY CHALLENGES THROUGH LEGAL REFORM 86 (2007) (“Issues like . . . carbon sequestration are . . . likely to lose priority when there is decentralization.”).

110. Costenbader, *supra* note 93, at 63.

111. *Id.*

112. *Id.*

113. *Id.*

114. *See Copenhagen Accord, supra* note 24, ¶ 6.

and proposals suggest that, similar to scope, there are three mechanisms through which finances could be provided: the carbon market, a dedicated fund, or a hybrid of the two.¹¹⁵ This section briefly explores what stages of financing are necessary to implement REDD, and the advantages and disadvantages of each financing mechanism.

a. Stages of Financing

It is generally agreed that there are two phases to REDD that will need funding.¹¹⁶ The first is a capacity-building phase, also referred to as “readiness.”¹¹⁷ The capacity-building phase includes, among other activities, building “infrastructure for monitoring emission reductions, clarifying land tenure, and strengthening institutional capacities for law enforcement.”¹¹⁸ This stage is essential for building a legal framework that can support REDD activities and ensure that REDD protects international obligations regarding indigenous rights.

The second stage of funding “comes into play when countries have adequately prepared to reduce, monitor, account for, and verify emissions reductions.”¹¹⁹ Funding at this stage includes both financing the costs of reducing emissions, as well as the costs of protecting the forest and distributing benefits and opportunity costs.¹²⁰ In order to make up for a loss of livelihood that comes from deforestation, “[f]inancing for this stage of REDD will need to represent a viable and long-term alternative to the income generated through activities resulting in deforestation and degradation.”¹²¹

b. Financing Mechanisms

There are three broad proposals for REDD financing: carbon market-based, non-market-based, or a hybrid of the two.¹²² The market-based approach allows companies in Annex I countries to offset part of their emission reduction obligations by paying for avoided deforestation and degradation projects in developing nations.¹²³ This approach is similar to

115. See Daviet, *supra* note 56. See generally Charlotte Streck, *Financing REDD: A Review of Selected Policy Proposals*, WWF (Jan. 2009), <http://assets.panda.org/downloads/redd.pdf> (providing an outline of REDD funding proposals submitted by ten countries and eight NGOs).

116. See Michael Dutschke et al., *How Do We Match Country Needs with Financing Sources?*, in *MOVING AHEAD WITH REDD*, *supra* note 90, at 41, 41–42.

117. See *id.* at 42.

118. See *id.*

119. T. Johns et al., *A Three-Fund Approach to Incorporating Government, Public and Private Forest Stewards into a REDD Funding Mechanism*, 10 INT’L FORESTRY REV. 458, 461 (2010).

120. See Dutschke et al., *supra* note 116, at 42.

121. Johns, *supra* note 119, at 461.

122. Clarke, *supra* note 40, at 43.

123. See T. Johns et al., *supra* note 119, at 460; see also Andrew Macintosh, *Can Money Grow on Trees?: Reducing Emissions from Deforestation and Degradation (REDD) in Developing Countries*, AUSTL. COUNCIL FOR INT’L DEV., 22–31 (Oct. 2010),

the Clean Development Mechanism (CDM) in the Kyoto Protocol, which allows Annex I countries to earn “credits” by paying for avoided deforestation projects in developing countries, while continuing “business as usual” back home.¹²⁴ While the only forestry projects permitted under the CDM are afforestation and reforestation projects, market-based REDD financing would expand these benefits to avoided deforestation and degradation projects.¹²⁵

An important restriction of market-based funding is that project developers can only earn credits for “additional” projects, that is, the emissions reduction would not otherwise have occurred. “For forest credits to be traded in international carbon markets, the reductions in emissions must be measurable, and they must be over and above what would have happened otherwise.”¹²⁶ To make sure a REDD project is “additional,” a “reference level must be established, which forms the baseline against which the impact of programmes to reduce deforestation is measured.”¹²⁷

Because of the baseline requirement in market-based funding, countries that do not have historically high levels of deforestation, or those who have already taken steps to reduce deforestation, may not benefit.¹²⁸ Market-based financing is additionally criticized because it would allow the market to control REDD, possibly to the exclusion of local communities. This possibility is greatest in countries that have a high prevalence of corruption and have weak forest tenure structures.¹²⁹

On the other hand, the market-based approach is encouraged because it would likely allow for the greatest amount of funds to be raised for REDD. A market-based REDD scheme would encourage private investors to become involved with REDD by making carbon a valuable commodity and increasing private sector confidence.¹³⁰ Because of this, many believe that a market-based scheme is the best financing mechanism to produce enough money to make REDD financially viable.¹³¹

Most NGOs and indigenous peoples’ groups support a non-market based mechanism for funding, however, which would likely be a voluntary or compulsory fund created by “Annex I countries, and distributed to

<http://www.redd-monitor.org/wordpress/wp-content/uploads/2010/11/ACFID-REDD-report.pdf> (explaining how REDD can be linked to the carbon market).

124. See Macintosh, *supra* note 123, at 15–17.

125. See *id.*

126. Kate Dooley, *Why Congo Basin Countries Stand to Lose Out from a Market-Based REDD*, FERN, 2 (Dec. 2009), <http://www.fern.org/sites/fern.org/files/congo%20basin%20countries%20lose%20out.pdf>.

127. *Id.*

128. See Macintosh, *supra* note 123, at 19.

129. See generally Griffiths, *supra* note 10 (explaining that indigenous groups are in danger of losing their livelihoods without seeing any financial compensation, as market-based REDD programs do not allow for indigenous participation and frequently distribute finances to powerful government groups and corporations, bypassing vulnerable indigenous communities); see also *id.* at 29 (noting that market-based REDD could exacerbate poverty and force indigenous communities to relocate).

130. See MERIDIAN INST., FOSTERING CARBON MARKETS INVESTMENT IN REDD 7–8 (2009).

131. See Dutschke et al., *supra* note 116, at 52.

participating developing countries to aid and reward their efforts to reduce emissions from deforestation and forest degradation.”¹³² This method of funding more closely resembles development assistance, as money comes from discretionary aid donors and voluntary sources, not compliance markets.¹³³ A fund-based mechanism is considered to be safer and easier for local communities who wish to protect their forests. This method of financing is better able to support REDD-capacity-building efforts, which must take place in a country before the REDD projects start generating money on the carbon market.¹³⁴ Many indigenous groups fear that, absent fund-based financing, capacity building will be limited, and the protections that indigenous groups need will not be built into a REDD legal framework.¹³⁵

Finally, there are additional proposals for financing that involve a mix between market- and fund-based approaches. These so-called “hybrid” methods of financing could involve taxes or levies, in which a fixed percentage of international carbon trading schemes would be set aside for REDD funding. Proponents of this method of financing state that it can combine the benefits of market finance with the delivery of social benefits to local communities.¹³⁶ Currently, the majority of REDD projects utilize fund-based mechanisms, but more and more market-based approaches are predicted to emerge in a few years’ time, causing many commentators to predict that, ultimately, both approaches will coexist.¹³⁷

The environmental, economic, and social impacts of REDD ultimately depend upon which policy variables are selected in the international REDD agreement. Because of the uncertainty surrounding REDD—and indigenous groups’ inability to influence REDD decisions¹³⁸—many forest-dwelling peoples are opposed to avoided deforestation programs. The following section provides background on the interplay between indigenous rights and REDD, explaining where indigenous rights are found in international law and how those rights are upheld, or ignored, in existing REDD proposals. Part I.D. also emphasizes the importance of protecting indigenous rights in future REDD proposals.

132. T. Johns et al., *supra* note 119, at 460.

133. See David Brown et al., *How Do We Achieve Co-benefits and Avoid Doing Harm?*, in *MOVING AHEAD WITH REDD*, *supra* note 90, at 107, 110–11.

134. See Louis V. Verchot & Elena Petkova, *The State of REDD Negotiations: Consensus Points, Options for Moving Forward and Research Needs to Support the Process*, CTR. FOR INT’L FORESTRY RESEARCH, 15 (Oct. 2009), http://www.iisd.org/pdf/2010/redd_state_of_negotiations.pdf.

135. See generally Macintosh, *supra* note 123.

136. See *Last Gasp for the Forest*, *ECONOMIST*, Sept. 24, 2009, at 93–95.

137. See *id.*

138. See, e.g., Griffiths, *supra* note 10, at 9 (noting that indigenous groups have repeatedly complained that they do not have adequate representation during UNFCCC climate negotiations, and thus are unable to impact the outcome of negotiations).

D. “No Rights, No REDD”: Indigenous Peoples’ Response to REDD

While policymakers have agreed on the benefits of REDD programs at the international level, many forest-dwelling peoples are worried about the effects REDD will have on the ground.¹³⁹ Indigenous groups in particular have expressed concern that by placing a price tag on trees, “REDD programmes could undermine some of the ecosystem services that forests provide locally, such as providing food, fuel and medicine to the millions of poor who live in and depend on the forests.”¹⁴⁰

Indigenous groups argue that there is both a moral and practical imperative for emphasizing equity and protecting indigenous rights in REDD.¹⁴¹ They assert that it is fundamentally unfair that REDD would curb development for indigenous peoples, who have contributed least to climate change, while allowing Annex I nations to continue business as usual.¹⁴² If REDD is designed without the input of forest-dwelling peoples, Annex I nations may be able to benefit economically and environmentally from indigenous groups’ loss of livelihood.¹⁴³ Practically speaking, REDD policies will be most successful when they have the cooperation and support of the people who have been traditional stewards of the forests. Environmental NGOs and researchers agree that “REDD will never succeed . . . without the involvement of the [communities] that are making decisions every day as to whether to cut a tree down or leave it standing.”¹⁴⁴

Indigenous peoples have highlighted three key areas that should be included in REDD schemes. First, indigenous peoples should have the right to participate in the REDD decision-making process, “in accordance with the[ir] right to free, prior and informed consent.”¹⁴⁵ Second, REDD should respect indigenous property rights to lands and resources, in accordance with international human rights instruments and obligations.¹⁴⁶ Finally, REDD should “[r]ecognize the fundamental role and contribution of indigenous peoples’ traditional knowledge, innovations and practices.”¹⁴⁷

139. See generally Griffiths, *supra* note 10 (noting that indigenous groups have protested UNFCCC REDD proposals because they lack adequate safeguards for indigenous rights); SEYMOUR, *supra* note 44 (suggesting that environmental policies should be equitable and include indigenous input).

140. See Lawlor & Huberman, *supra* note 16, at 271.

141. Cf. Adianto P. Simamora, *No Rights, No REDD: Communities*, JAKARTA POST (July 1, 2010), <http://www.thejakartapost.com/news/2010/07/01/no-rights-no-redd-communities.html> (quoting Abdon Nababan, the Secretary General of the Alliance of Archipelagic Indigenous People, who was speaking about the impact of REDD on indigenous rights in Indonesia).

142. See generally Griffiths, *supra* note 10.

143. See generally *id.*

144. Anderson, *supra* note 10, at 26; see also Florence Daviet et al., *REDD Flags: What We Need to Know About the Options*, WORLD RES. INST., 2 (Dec. 2007), <http://pdf.wri.org/redd-flags.pdf> (noting that indigenous participation is “fundamental” to the success of any REDD program).

145. Fincke, *supra* note 29, at 5.

146. *Id.*

147. *Id.*

Indigenous communities have warned that they will reject the implementation of an international REDD scheme unless it guarantees their rights to livelihood in the forests.¹⁴⁸ The Secretary-General of the Alliance of Archipelagic Indigenous Peoples summed up a common sentiment when he bluntly told reporters, "Our stance is clear—no rights, no REDD."¹⁴⁹

1. Indigenous Rights in International Law

In 1989, the International Labour Organization's Convention Concerning Indigenous and Tribal Peoples in Independent Countries (ILO 169) was adopted.¹⁵⁰ Although only ratified by twenty-two nations, ILO 169 is still recognized as the paramount international law guaranteeing the rights of indigenous peoples.¹⁵¹ ILO 169 "outlines the special rights of such peoples regarding activity on their customary lands."¹⁵² In its parts most pertinent to REDD, ILO 169 grants indigenous peoples the rights to "exercise control . . . over their own economic, social and cultural development" and participate in development plans that "may affect them directly."¹⁵³ In addition, Article 14 guarantees that indigenous peoples' "rights of ownership and possession . . . over the lands which they traditionally occupy shall be recognised"¹⁵⁴ and Article 16 states that they "shall not be removed from the lands which they occupy."¹⁵⁵

Indigenous peoples' rights were further recognized in 2007 by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).¹⁵⁶ Approved by the UN thirty years after it was originally introduced, UNDRIP builds on ILO 169 by emphasizing that parties are required to "grant legal title to indigenous peoples' customary lands and to ensure their free, prior, and informed consent for any activity on, or their resettlement from, their lands."¹⁵⁷ While UNDRIP is not binding, it does "provide[] evidence of a worldwide consensus on indigenous peoples' right to self-

148. See, e.g., United Nations Permanent Forum on Indigenous Issues, N.Y.C., U.S., Apr. 21–May 2, 2008, *Report on the Seventh Session*, ¶¶ 44–45, U.N. Doc. E/C.19/2008/13 (2008) (stating that indigenous peoples will not support REDD policies unless they uphold social justice, environmental justice, and human rights).

149. Simamora, *supra* note 141.

150. See International Labour Organization Indigenous and Tribal Peoples Convention (June 27, 1989), Geneva, Switz., *Convention 169*, available at <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C169> [hereinafter *ILO 169*].

151. See *Convention No. 169*, INT'L LABOUR ORGANIZATION, <http://www.ilo.org/ilolex/cgi-lex/ratifce.pl?C169> (last visited Oct. 20, 2011) (noting that Brazil ratified ILO 169 in 2002, but Indonesia has not ratified as of October 2011).

152. Lawlor & Huberman, *supra* note 16, at 276.

153. *ILO 169*, *supra* note 150, at art. 7.

154. *Id.* at art. 14.

155. *Id.* at art. 16.

156. See United Nations Declaration on the Rights of Indigenous Peoples, G.A. Res. 61/295, U.N. Doc A/RES/61/295 (Sept. 13, 2007) [hereinafter UNDRIP].

157. Lawlor & Huberman, *supra* note 16, at 277; see also UNDRIP, *supra* note 156, at art. 26 (recognizing that "[i]ndigenous peoples have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired").

determination.”¹⁵⁸ In fact, 144 nations voted that the UN should approve UNDRIP, while only four (Canada, New Zealand, the United States, and Australia) voted against the Declaration.¹⁵⁹ All four nations have since reversed their decisions and signed UNDRIP.¹⁶⁰

a. Free, Prior, Informed Consent

Both UNDRIP and ILO 169 explicitly recognize that indigenous peoples have a right to “free, prior and informed consent” (FPIC) regarding activities that directly or indirectly affect them.¹⁶¹ FPIC is crucial to the protection of indigenous peoples’ right to self-determination.¹⁶² “Free” implies that local communities should not be coerced, manipulated, or intimidated while making decisions.¹⁶³ “Prior” means that local communities are contacted well before the authorization or implementation of any activities, and that there is sufficient time for consultation.¹⁶⁴ “Informed” means that indigenous peoples have knowledge of the

nature, size, duration, pace, reversibility, scope and areas of the proposed activities; that they know the reasons why the project/activity is being proposed; and that they have access to a preliminary assessment of the possible economic, social and environmental impacts (including potential risks as well as fair and equitable benefit sharing . . .).¹⁶⁵

In addition, some commentators urge that local communities should be able to participate in decisions that affect their livelihoods through their own freely chosen representatives and customary institutions.¹⁶⁶ Others argue that REDD processes should be carefully constructed so that FPIC is protected, otherwise REDD will violate international human rights obligations, potentially harm indigenous livelihood and self-determination, and create further environmental vulnerabilities.¹⁶⁷

158. Melissa Farris, Note, *The Sound of Falling Trees: Integrating Environmental Justice Principles into the Climate Change Framework for Reducing Emissions from Deforestation and Forest Degradation*, 20 FORDHAM ENVTL. L. REV. 515, 534 (2010).

159. See *UNDRIP Adopted by the General Assembly*, UNITED NATIONS PERMANENT FORUM ON INDIGENOUS ISSUES, <http://www.un.org/esa/socdev/unpfii/en/declaration.html> (last visited Oct. 20, 2011).

160. See *id.*

161. See UNDRIP, *supra* note 156, at arts. 10, 19, 28, 29; see also ILO 169, *supra* note 150, at art. 14.

162. See Enrique Ibarra Gené & Arif Aliadi, *REDD (Reducing Emissions from Deforestation and Forest Degradation): Mitigation, Adaptation and the Resilience of Local Livelihoods* 5 (Asia Sec. Initiative Policy Series, Working Paper No. 8, 2010), available at http://www.rsis.edu.sg/NTS/resources/research_papers/MacArthur%20Working%20Paper_Enrique_and_Arif.pdf.

163. *Id.*

164. *Id.*

165. *Id.* (elaborating that informed “also means [indigenous groups] know who are likely to be involved in the execution of the proposed project (including community members, private sector staff, research institutions, government employees, etc.) and that they understand the procedures that may be involved”).

166. See *id.*

167. See, e.g., Fincke, *supra* note 29, at 5.

b. The Right to Property

In addition to being found in specific indigenous rights agreements, the right to hold property is identified as a general human right in both Article 17 of the Universal Declaration of Human Rights¹⁶⁸ and Article 21 of the American Convention on Human Rights.¹⁶⁹ Despite the widespread recognition of property rights, indigenous peoples are frequently stripped of their ownership entitlements, due in large part to the complexities of land tenure systems in developing countries.¹⁷⁰ In such systems, property rights frequently exist as both formally recognized statutory property rights and as informal customary rights.¹⁷¹ Overlapping systems of property rights often lead to legal “disputes between competing claimants,” undermining the security of both rights regimes.¹⁷² Indigenous peoples are especially vulnerable when statutory rights do not recognize customary rights because they largely live and work on lands that are not formally titled.¹⁷³

The Inter-American Court of Human Rights (IACHR) has issued two rulings regarding the protection of customary land rights. In 2001, the IACHR found that “the state must obtain consent from indigenous communities for activities on lands they have historically occupied and that the state must enact procedures to grant these communities legal title to their lands in order to uphold the Right to Property.”¹⁷⁴ Moreover, in the case of *Saramaka People v. Suriname*,¹⁷⁵ the IACHR found that the right to property required the Suriname government to grant the Saramaka people legal title to their customary lands.¹⁷⁶ Although the court held that the Saramaka people have the right to own natural resources on their customary land, it found that the State may still restrict the “use of property in circumstances that are defined by law and that are proportionate to the

168. Universal Declaration of Human Rights, G.A. Res. 217 (III) A, art. 17 U.N. Doc. A/RES/3/217(III) (Dec. 10, 1948).

169. American Convention on Human Rights art. 21, Nov. 22, 1969, 5 O.A.S.T.S. 36, 1144 U.N.T.S. 123.

170. See Gershon Feder et al., *Land Tenure and Property Rights: Theory and Implications for Development Policy* 5 WORLD BANK ECON. REV. 135 (1991). See generally Jeffery Hatcher, *Securing Tenure Rights and Reducing Emissions from Deforestation and Degradation (REDD): Costs and Lessons Learned* (Rights & Res. Initiative, Working Paper No. 120, 2009), available at http://www.rightsandresources.org/documents/files/doc_1474.pdf.

171. See Hatcher, *supra* note 170, at 4.

172. See Annalisa Savaresi & Elisa Morgera, *Ownership of Land, Forest and Carbon*, in LEGAL FRAMEWORKS FOR REDD, *supra* note 17, at 15, 16.

173. See *id.*

174. Lawlor & Huberman, *supra* note 16, at 279. See generally *Mayagna (Sumo) Awas Tingni Community v. Nicaragua*, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 79, ¶ 153 (Aug. 31, 2001); Jonathan Vuotto, *Awes Tingni v. Nicaragua: International Precedent for Indigenous Land Rights?* 22 B.U. INT’L L.J. 219 (2004) (providing further commentary on the impact of the *Awes Tingni* decision).

175. Inter-Am. Ct. H.R. (ser. C) No. 172, (Nov. 28, 2007).

176. See *id.*

achievement of a legitimate objective.”¹⁷⁷ Thus, the State may grant concessions on the territory to logging and mining companies.¹⁷⁸

Along with statutory and customary ownership rights, property can also be classified as either private or public. Private ownership is “generally characterized by rights that cannot be unilaterally extinguished by government, without some form of due process and compensation.”¹⁷⁹ Both individuals and communities, such as indigenous groups, are eligible to own private property.¹⁸⁰ Publicly owned land is managed directly by government agencies, who may allocate the land to communities or indigenous groups for management purposes on a “permanent or semi-permanent basis.”¹⁸¹ In many developing countries, indigenous groups live on publicly owned land. Thus, even if the government allocates certain rights over the land or resources, it may ultimately reserve the right to access or sell the land.¹⁸²

In the context of carbon property rights, the interplay between public and private land rights creates multiple ownership options. One possibility is that carbon rights and land rights will be intertwined, such that the owner of a forest is also the owner of the carbon stored inside the forest.¹⁸³ In this scenario, the sequestered carbon does not exist as a separate entitlement. Thus, the “forest owner could not sell or give the carbon away independently of the forest.”¹⁸⁴ Alternatively, the carbon could be “subject to a separate, alienable property right, independent of the property of the forest, [so that] the owner could sell that right without conveying forest ownership.”¹⁸⁵ This scenario would incorporate usufruct rights, which create property arrangements in which one entity may “use and derive benefit from property that belongs to another entity,” as long as the property is not impaired.¹⁸⁶ Most likely, usufruct rights over sequestered carbon would be in the form of *profit à prendre*, which is a specific kind of easement that grants one entity the right to access a plot of land belonging to another entity and take biological resources that are found naturally on

177. Lawlor & Huberman, *supra* note 16, at 280 (quoting James Harrison, *International Law—Significant Environmental Cases 2007-08*, 20 J. ENVTL. L. 475, 481 (2008)).

178. *See Saramaka*, Inter-Am. Ct. H.R. (ser. C) No. 172. *See generally* Marcos A. Orellana, *Saramaka People v. Suriname*, 102 AM. J. INT’L L. 841 (2008) (discussing how indigenous rights were changed following *Saramaka*).

179. Savaresi & Morgera, *supra* note 172, at 19. *See generally* Hatcher, *supra* note 170 (explaining that private ownership is most secure, as governments and other powerful actors have more difficulty expropriating private land rights).

180. *See generally* LORENZO COTULA ET AL., *TENURE IN REDD: START POINT OR AFTERTHOUGHT?* (2009) (discussing various structures of forest property rights).

181. Savaresi & Morgera, *supra* note 172, at 19.

182. *See* ANDY WHITE ET AL., *WHO OWNS THE WORLD’S FORESTS? FOREST TENURE AND PUBLIC FORESTS IN TRANSITION* 8 (2002).

183. *See* Savaresi & Morgera, *supra* note 172, at 24.

184. *Id.*

185. *Id.*

186. *See* David Takacs, *Forest Carbon: Law and Property Rights*, CONSERVATION INT’L, 15 (Nov. 1, 2009), http://www.conservation.org/Documents/CI_Climate_Forest-Carbon_Law-Property-Rights_Takacs_Nov09.pdf.

the land.¹⁸⁷ *Profits á prendre* are generally long term rights, as opposed to the right to enter land just once to collect recently fallen trees.¹⁸⁸ Thus, in the carbon context, it is possible that a landowner will grant *profit á prendre* to another entity, who will manage the trees for carbon sequestration purposes without actually owning the area.¹⁸⁹

Additionally, "the carbon sequestered in forests may be treated as a publicly-owned asset, regardless of forest and land ownership."¹⁹⁰ Even if a forest were privately owned, the state could declare the sequestered carbon as a public asset and manage the carbon (and the forest), then distribute benefits to the forest owners.¹⁹¹ In this way, the government would own the carbon. In this situation, the government may have the power to sell the carbon, in which case it could put the benefits earned from the sequestered carbon into a trust for the good of either the private forest owners or the general public.¹⁹² Additionally, depending on national laws, the government might require forest owners to protect the carbon and avoid deforestation.¹⁹³

There is a high probability that vulnerable indigenous groups will be further marginalized by REDD.¹⁹⁴ One primary concern is that indigenous peoples who have customary land rights on government land will be ordered to stop deforestation—thereby giving up their livelihood—and yet will not receive any financial benefits from the sale of sequestered carbon.¹⁹⁵ In addition to indigenous concerns, prominent environmental economic reports emphasize the importance of a clear property rights framework. For example, the *Stern Review* emphasizes the importance of property rights and argues that a clear rights structure is essential to effective forest management for carbon sequestration.¹⁹⁶ Similarly, the *Eliasch Review* emphasizes that a property rights system which provides benefits to poor people and forest communities is necessary for the long-term sustainability of REDD.¹⁹⁷

187. See, e.g., Karen Gould et al., *Legislative Approaches to Forest Sinks in Australia and New Zealand: Working Models for Other Jurisdictions?*, in CLIMATE CHANGE AND FORESTS, *supra* note 28, at 253, 253–71 (explaining that the government of New South Wales, Australia was the first to create a specific property right in forest carbon, and did so following a *profit á prendre* model).

188. See *id.* at 262.

189. See *id.* at 262–63.

190. Savaresi & Morgera, *supra* note 172, at 25.

191. *Id.*

192. *Id.* at 25–26.

193. *Id.* at 26.

194. See *id.*; see also William Sunderlin, *Tenure: What Will REDD Mean for Forest Communities?*, in REDD, FOREST GOVERNANCE, AND RURAL LIVELIHOODS, *supra* note 83, at 31, 32 (defining "tenure" as "the right . . . that determines who can hold and use forestlands and resources, for how long and under what conditions," and explaining that clearly defined tenure that recognizes customary rights is necessary for the protection of indigenous rights in REDD).

195. See COTULA, *supra* note 180, at 15–18.

196. See generally STERN, *supra* note 9.

197. See generally ELIASCH, *supra* note 9.

2. Indigenous Rights (or the Lack Thereof) in REDD

Absent uniform international guidelines, REDD country proposals and pilot projects are varied in their primary goals and policy practices. Generally speaking, however, each REDD program is guided by the “3E” criteria: effectiveness, efficiency, and equity.¹⁹⁸ Effectiveness means the REDD program creates significant emissions reductions, while efficiency asks if the reductions are being achieved at minimum cost.¹⁹⁹ Equity looks at who is bearing the burden and benefits of REDD, both among and within nations.²⁰⁰ While ideally the 3Es would exist in equilibrium, many REDD projects view the criteria as trade-offs, rather than a balance. In efforts to make REDD financially and environmentally appealing, equity is most frequently sacrificed.²⁰¹ This section explores both national REDD proposals and voluntary REDD projects in terms of how well they actualize the third “E” by protecting indigenous rights.

a. Rights in REDD Proposals

Existing REDD proposals do not contain “explicit recognition of the need to respect the *rights* of indigenous peoples.”²⁰² General language regarding indigenous rights was included in the preamble to the COP-13 REDD decision, which states: “[T]he needs of local and indigenous communities should be addressed when action is taken to reduce emissions from deforestation and forest degradation in developing countries.”²⁰³ Indigenous parties were not satisfied, protesting that vague language placed in the preamble of the COP-13 agreement was not strong enough to adequately safeguard their rights.²⁰⁴ The International Forum of Indigenous Peoples on Climate Change adamantly protested REDD, claiming that it would create more violations of indigenous rights, giving “States and Carbon Traders control . . . over the forests.”²⁰⁵ The indigenous community’s primary concern was over property rights, as they

198. See Arild Angelson & Sheila Wertz-Kanounnikoff, *What Are the Key Design Issues for REDD and the Criteria for Assessing Options?*, in MOVING AHEAD WITH REDD, *supra* note 90, at 11, 18–21.

199. See *id.* at 18–19.

200. See *id.* at 20–21 (elaborating that equity can be measured on two levels: within a single nation, equality means that REDD benefits are being fairly distributed at all levels, while on the international scale, equity means that all nations are able to participate in REDD, regardless of their wealth).

201. See generally Griffiths, *supra* note 10 (noting that because indigenous groups are not adequately represented in UNFCCC negotiations, REDD decisions favor the power players—such as big companies and governments—who are more concerned with the economics than the equality of REDD).

202. Griffiths, *supra* note 10, at 7.

203. *Bali Roadmap*, *supra* note 51, at pmb1.

204. See *Statement by the International Forum of Indigenous Peoples on Climate Change (IFIPCC) on ‘Reduced Emissions from Deforestation and Forest Degradation’ (REDD) Agenda Item at the UNFCCC Climate Negotiations*, FOREST PEOPLES PROGRAMME (Nov. 1, 2007), <http://www.forestpeoples.org/topics/un-framework-convention-climate-change-unfccc/news/2011/05/statement-international-forum-indi>.

205. *Id.*

worried that they would lose access to their customary lands and resources.²⁰⁶ Additionally, indigenous peoples stated the need for improved participation in UNFCCC deliberations, arguing that they should be included in intergovernmental decisions that will directly affect indigenous rights and livelihood.²⁰⁷

In 2008, eight Amazonian countries signed The Manaus Declaration and Areas of Consensus and Disagreement to "ensure the full exercise of the sovereign rights of the Amazon countries over the resources of the region's biological diversity."²⁰⁸ Signatories to the Manaus Declaration agreed that REDD projects must "recognise the capability of sustainable management of forests as exercised by indigenous peoples and traditional communities, as well as the historical role of these peoples and communities in the conservation and in the equilibrium of global climate to develop a compensation system."²⁰⁹

Although indigenous activists stressed that there must be a stronger commitment to protect rights and equity in future Convention agreements, the Copenhagen Accord did not contain any specific safeguards of indigenous rights.²¹⁰ The lack of rights protection was part of the reason that the COP-15 did not yield an agreement, as some countries refused to support an agreement that did not reference indigenous rights.²¹¹ COP-16's Cancun Accord is credited for including rights safeguards because it requests that each country develop a system to track rights protection before implementing REDD programs.²¹² While this is seen as a big step towards ensuring that REDD respects indigenous rights, the Accord's language does not contain specific details for the implementation of a rights-tracking system.²¹³ For example, there is no guidance regarding what information must be collected, how the information will be shared, or for what purpose.²¹⁴ Further, the Accord does not name any intergovernmental

206. See generally *Climate Change, Human Rights and Indigenous Peoples*, INT'L INDIAN TREATY COUNCIL (2008), <http://www.treatycouncil.org/PDF/HR%20IPS%20and%20Climate%20Change%20corrfinal122708OHCHRa.pdf>.

207. See generally *id.*

208. See Mario Osava, *The Manaus Declaration: 8 Countries Assert Sovereignty over the Amazon Rainforest*, MONGABAY, <http://www.mongabay.com/external/ACTO.htm> (last visited Oct. 20, 2011).

209. Lawlor & Huberman, *supra* note 16, at 273 (internal quotations omitted).

210. See Fincke, *supra* note 29, at 6 (noting that COP agreements reference human rights documents but do not provide explicit guidelines to protect human rights).

211. See Press Release, Plurinational State of Bolivia, Bolivia Decries Adoption of Copenhagen Accord II Without Consensus (Dec. 11, 2010), available at <http://pwccc.files.wordpress.com/2010/12/press-release-history-will-be-the-judge.pdf> (claiming that Bolivia opposed both the Copenhagen and Cancun Accords because they did not adequately protect indigenous communities against rights abuses); see also Bodansky, *supra* note 23, at 231 (noting that Bolivia and Venezuela led a small group of nations in opposition against the Copenhagen Accord).

212. See *Cancun Accord*, *supra* note 61, § III(c)(72); see also *Climate Change Diplomacy*, *supra* note 63.

213. See *Cancun Accord*, *supra* note 61, § III(c)(72); see also Austin, *supra* note 74 (providing further commentary on which safeguards are absent from international REDD agreements).

214. See *Cancun Accord*, *supra* note 61, § III(c)(72).

institution that would help gather information and determine if adequate rights safeguards are in place.²¹⁵

b. Indigenous Rights in Voluntary REDD Projects

While the UNFCCC agreements don't explicitly safeguard indigenous rights, international standards within the voluntary carbon market require certain rights protections before REDD pilot projects will be approved.²¹⁶ Because an international REDD regime has not yet been established, current REDD projects exist within a voluntary system which has developed its own rules to regulate REDD.²¹⁷ Voluntary REDD projects must meet certain standards in order to receive certification, which promotes the project's legitimacy and makes it more attractive to investors.²¹⁸ The international community has consolidated around a select number of standards that are expected to "shape the 'law' governing voluntary forest carbon schemes."²¹⁹ This section focuses on two standards that promote the community benefits (as opposed to the monitoring and verification efficiency) of REDD projects—the Community, Climate, and Biodiversity Alliance (CCB) and the Forest Carbon Partnership Fund.

i. Climate, Community, and Biodiversity Standards

For assessing the broader social and environmental impacts of projects, the CCB Standards dominate.²²⁰ The CCB Alliance is a conglomerate of international NGOs and research institutions that developed voluntary standards to help ensure that REDD projects create a sustainable environment while allowing indigenous peoples to maintain a sustainable lifestyle.²²¹ The CCB Alliance promotes its standards as a catch-all, applicable to both government-led and voluntary REDD programs, regardless of whether they are implemented at a national or regional level, or financed through funds or the carbon market.²²² Different from other voluntary standards that regulate accounting mechanisms, the CCB standards aim to "ensur[e] that there are net community and biodiversity

215. *See id.*

216. *See Overview: Forest Carbon Standards in the Voluntary Market*, CARBON POSITIVE, <http://116.12.48.151/viewarticle.aspx?articleID=1433> (last visited Oct. 20, 2011) (providing descriptions of the main standards regulating the voluntary carbon market, including the Voluntary Carbon Standards, which provide guidelines for carbon measurement and verification, and the Community, Climate, and Biodiversity Standards, which provide regulations regarding the social impacts of REDD).

217. *See* Nina Chestney, *Forestry Gains Momentum in Voluntary Carbon Market*, REUTERS, (Sept. 28, 2010, 12:15 PM), <http://www.reuters.com/article/idUSTRE68R3IR20100928>.

218. *See id.*

219. Takacs, *supra* note 186, at 24.

220. *See id.*

221. *Home*, CLIMATE, COMMUNITY AND BIODIVERSITY ALLIANCE, <http://www.climate-standards.org/index.html> (last visited Oct. 20, 2011).

222. *See id.*

benefits to a planned [REDD] project.”²²³ Because they focus on co-benefits, rather than accounting mechanisms, the CCB standards are frequently used in conjunction with other voluntary standards that are more measurement-focused.²²⁴

The CCB Standards are used to certify REDD schemes at the project level, independent of national REDD programs. A third-party auditor will evaluate each project that has applied to be CCB certified. In an effort to keep costs manageable and to have credible evaluators, the CCB Alliance “may authorize certifiers already approved by the Kyoto Protocol’s Clean Development Mechanism, the California Climate Action Registry, [or other] existing forest certification programs.”²²⁵ The Standards are separated into four sections: general, climate, community, and biodiversity. To be approved, a REDD project must fulfill the fifteen required standards, which include “Net Positive Community Impacts,” “Community Impact Monitoring,” and “Land Tenure” evaluation.²²⁶ There are also a number of “optional” standards that, if met, would elevate the REDD project to “Silver” or “Gold” certification.²²⁷ REDD capacity building is one of these optional criteria.²²⁸

The CCB Standards have received positive feedback from NGOs that represent indigenous groups, who have reported that “CCB Standards are . . . extremely important as a means to safeguard and promote the interest of . . . often marginalized groups.”²²⁹ Because the Standards are relatively new, however, their long-term ability to protect indigenous rights in a REDD regime remains untested.

ii. World Bank Forest Carbon Partnership Fund

The World Bank’s Forest Carbon Partnership Fund (FCPF) aims to “assist Eligible REDD Countries in their efforts to achieve emission reductions . . . by providing them with financial and technical assistance in building their capacity to benefit from . . . future systems of positive incentives for REDD.”²³⁰ Unlike the project-based CCB standards, the

223. See *Rules for the Use of the Climate, Community & Biodiversity Standards*, CLIMATE, COMMUNITY AND BIODIVERSITY ALLIANCE, 3 (June 21, 2010), http://www.scs-certified.com/docs/CCB_Standards_Rules_062110.pdf.

224. See Takacs, *supra* note 186, at 24 (noting that the Voluntary Carbon Standard and the Clean Development Mechanism are voluntary standards that focus on accounting mechanisms in REDD, and can be used simultaneously with the CCB Standards).

225. *Climate, Community and Biodiversity Project Design Standards*, CLIMATE, COMMUNITY AND BIODIVERSITY ALLIANCE, 5 (Oct. 2005), <http://www.climate-standards.org/images/pdf/CCBStandards.pdf>.

226. *Id.* at 6–7.

227. *Id.* at 7.

228. *Id.*

229. *New Standards Ensure Forest Carbon Projects Protect Indigenous People, Biodiversity*, MONGABAY (Dec. 8, 2008), <http://news.mongabay.com/2008/1208-ccba.html> (quoting Charles Ehrhart, head of the Climate Change Program at CARE International).

230. Charter Establishing the Forest Carbon Partnership Facility, INT’L BANK FOR RECONSTRUCTION & DEV., May 11, 2011, at 11, available at

FCPF works at the national level, helping countries become better equipped to adopt REDD programs.²³¹ In October 2008, over forty developing nations expressed interest in working with the FCPF.²³²

There are two FCPF funds—a Readiness Fund and a Carbon Fund—which are implemented in stages. While the Carbon Fund will help with developing the carbon market once the REDD project has been implemented, the Readiness phase focuses on capacity building before REDD begins.²³³ The Readiness Fund aims to protect indigenous communities by developing guidelines for national legal frameworks, such as property rights, community involvement, and local governance.²³⁴ Countries interested in participating must submit a Readiness Plan Idea Note (R-PIN) to the FCPF.²³⁵ If approved, the country will receive grants to assist with REDD planning. Unlike the CCB Standards, capacity building is mandatory before a project can receive further FCPF funding and approval.²³⁶

The FCPF claims to be “inclusive of all the stakeholders and rights-holders in the forest sector.”²³⁷ Even so, the FCPF has been maligned by indigenous groups for “violating its own rules” and failing to safeguard indigenous rights, most importantly the right to FPIC.²³⁸ The FCPF was criticized in 2007 for prematurely launching REDD pilot projects in an effort to have data ready to present at COP-13 in Bali.²³⁹ As a result, the FCPF implemented a “rushed design” and did not properly consult with indigenous groups.²⁴⁰ In addition, the FCPF has faced criticism for

<http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Document%20s/PDF/May2011/FCPF%20Charter%20-%20CF%2005-11-2011%20clean.pdf>.

231. See Kate Dooley et al., *Cutting Corners: World Bank's Forest and Carbon Fund Fails Forests and Peoples*, FERN, 5 (Nov. 2008), <http://www.fern.org/sites/fern.org/files/document%20cutting%20corners.pdf>.

232. See Crystal Davis et al., *A Review of 25 Readiness Plan Idea Notes from the World Bank Carbon Partnership Facility 1* (World Res. Inst., Working Paper, 2009), available at http://pdf.wri.org/world_bank_readiness_review.pdf (providing a detailed analysis of 25 countries that have already started to work with FCPF).

233. See *Background Analysis of REDD Regulatory Frameworks*, *supra* note 80, at 82.

234. See *id.* at 82–83.

235. See Davis et al., *supra* note 232, at 1 (noting that the first step for developing countries who wish to reduce deforestation and access World Bank funds is an R-PIN).

236. See *id.*

237. FCPF Brochure, FOREST CARBON PARTNERSHIP FACILITY, at 16 (2009), available at http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Document%20s/PDF/Sep2010/New%20FCPF%20brochure%20--%20low%20resolution%20051809_0.pdf. The FCPF General Information Memorandum states: “[I]t is important that these actors participate early on in the readiness process. Countries will . . . make special efforts to ensure that forest-dependent indigenous peoples and other forest dwellers meaningfully participate in decisions that may affect them and that their rights are respected.” *Information Memorandum*, FOREST CARBON PARTNERSHIP FACILITY, 4–5 (June 13, 2008), http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/FCPF_Info_Memo_06-13-08.pdf.

238. Griffiths, *supra* note 10, at 11–12. See generally Dooley et al., *supra* note 231.

239. See Mrinalini Rai, *REDD and the Rights of Indigenous Peoples: Ensuring Equity and Participation in World Bank Funds*, BRETTON WOODS PROJECT (Apr. 17 2009), <http://www.brettonwoodsproject.org/art-564322>.

240. *Id.*

allowing countries with underdeveloped R-PINs to receive REDD funding.²⁴¹

II. REDD RAMIFICATIONS: THE LEGAL CONSEQUENCES OF REDD IN BRAZIL AND INDONESIA

Although REDD standards in the voluntary carbon market have helped make rights protection an expected norm, the standards do not have the same persuasive power as national law. As indicated by the Cancun Accord, however, national legal frameworks will play a key role in the practical implementation of REDD, and will directly affect rights protection in each country.²⁴² Part II compares the legal frameworks of Brazil and Indonesia, analyzing how existing forestry legislation and new REDD-specific regulations protect indigenous rights in REDD.

As the international community focuses on which policy practices would be most effective in a global REDD regime, the legal consequences of REDD design and implementation mechanisms have received less attention.²⁴³ Legal clarity, especially at the national level, will be essential to the success of REDD projects, which must coexist with laws and regulations governing investment, taxes, property, and forestry—to name a few.²⁴⁴ Regardless of international REDD agreements, national law will ultimately dictate how REDD is implemented on the ground, thereby determining how REDD will affect the lives of forest-dwelling peoples.

REDD can either be integrated into existing national law or be the impetus for new laws that prevent deforestation.²⁴⁵ National constitutions, for example, frequently have broad environmental protection provisions that can be used as the foundation for REDD.²⁴⁶ Additionally, REDD can be incorporated into existing environmental law, such as a national environmental policy act or regulations that specifically govern the forestry sector.²⁴⁷ If preexisting laws will not adequately implement REDD, however, countries can create specific laws or regulations to “cover REDD comprehensively.”²⁴⁸ Most likely, it will be necessary both to create new

241. See Davis et al., *supra* note 232, at 2–3; see also Chris Lang, *Review of World Bank Approved R-PINs Finds Critical Issues Are Conspicuously Missing*, REDD-MONITOR (Mar. 12, 2009), <http://www.redd-monitor.org/2009/03/12/world-resources-institute-review-of-world-bank-approved-r-pins-finds-critical-issues-are-conspicuously-missing/> (noting that adequate tenure clarity, law enforcement, and monitoring mechanisms were missing from many of the approved R-PINs).

242. See *Cancun Accord*, *supra* note 61, § III(C), ¶¶ 68–79 (requesting that, before undertaking REDD activities, each country develops a national REDD plan, a national reference emission level, a national forest monitoring system, and a system to address safeguards for indigenous peoples’ rights).

243. See *id.*

244. See Costenbader, *supra* note 93, at 4–5 (noting that other legal areas that should be considered include investment law, tax law, and monitoring, reporting, and verification of REDD projects).

245. See *id.* at 11–13.

246. See *id.*

247. See *id.*

248. See *id.* at 12.

laws and integrate REDD into the preexisting legal framework, because constitutional provisions should be accompanied by new legislation detailing how to implement REDD, and independent laws must be in accordance with the established constitution.²⁴⁹

This Part compares the legal frameworks of Brazil and Indonesia, the worldwide leaders in deforestation. After giving a general overview of the governance structure and deforestation challenges in each nation, this Part specifically focuses on the laws and regulations regarding forest carbon ownership, REDD financing, and benefit distribution.

A. Brazil

Encompassing 477,698,000 ha,²⁵⁰ Brazil's forests sequester more carbon than those of any other nation.²⁵¹ Deforestation is rampant in Brazil, however, and accounts for approximately three-quarters of the country's annual carbon emissions.²⁵² Seventeen percent of the Amazon has already been lost,²⁵³ and some scientists predict that 55 percent will be destroyed by 2030 unless "something dramatic" occurs.²⁵⁴ Scientists and policymakers have identified an aggressive REDD scheme as the step that Brazil must take to save its rainforests.²⁵⁵

At the international level, Brazil has been an active participant in UNFCCC REDD negotiations. At COP-12 in Nairobi (2006), Brazil added a new proposal to the REDD discourse, suggesting that REDD provide "positive incentives for voluntary action" to reduce deforestation in developing countries.²⁵⁶ Instead of following the proposal put forth by the Coalition of Rainforest Nations—which would allow Annex I nations to use REDD as an "offset" option to meet mandatory emissions reductions targets—Brazil's proposal advocates a voluntary fund, in which Annex I nations would make performance-based donations, in addition to meeting

249. *See id.* at 11–13.

250. *Brazil Statistics*, MONGABAY, <http://rainforests.mongabay.com/deforestation/archive/Brazil.htm> (last visited Oct. 20, 2011).

251. *See* Takacs, *supra* note 186, at 34.

252. *See* Griffiths, *supra* note 10, at 3; *see also* Osvaldo Stella Martins et al., *Brazil, in REDD, FOREST GOVERNANCE AND RURAL LIVELIHOODS*, *supra* note 83, at 53, 55 (noting that key drivers of deforestation in Brazil are agribusiness—including grain production and conversion of forests to pastureland—cattle ranching, timber extraction and mining); Rhett A. Butler, *Big REDD*, WASH. MONTHLY (July–Aug. 2009), <http://www.washingtonmonthly.com/features/2009/0907.butler.html> (explaining that deforestation in Brazil peaked between 1997 and 2004 at 10,600 square miles per year, an area the size of Massachusetts).

253. *See The Juma Sustainable Development Reserve Project: Reducing Greenhouse Gas Emissions for Deforestation in the State of Amazonas, Brazil*, 5 (May 7, 2008), http://www.climate-standards.org/projects/files/pdd_juma_project_v_3_0.pdf [hereinafter *Juma PDD*].

254. *See* Takacs, *supra* note 186, at 34.

255. *See id.*

256. *See* 12th Conference of the Parties to the United Nations Framework Convention on Climate Change, Nairobi, Kenya, Nov. 6–17, 2006, *Submission from Brazil*, add. 5, U.N. Doc FCCC/CP/2006/5/Add. (Jan. 26, 2007) [hereinafter *Brazil Submission*].

their mandatory targets, to reward developing countries that have reduced deforestation.²⁵⁷

Domestically, Brazil has implemented sixteen voluntary REDD programs as of 2009,²⁵⁸ and has been developing a legal framework for REDD.²⁵⁹ Brazil faces two primary challenges with its internal REDD initiation. First, because it is a federation, Brazil must be aware of the interplay between national and state forestry laws.²⁶⁰ Additionally, Brazil must navigate a complex system of land rights that uses both customary and statutory law.²⁶¹ Because of these challenges—and the diverse solutions Brazil is testing in its pilot projects—Brazil’s legal framework presents an interesting study of how to implement REDD regulations and rewards across a multi-layered nation.

1. Forest Governance in a Federation

Brazil looks to a number of policies, regulations, and laws—both at the national and state level—to establish the legal basis for REDD initiation.²⁶² Brazil has used federalism to its benefit while implementing REDD pilot projects, allowing for varied policies to be tested under differing state laws.²⁶³ Even so, as Brazil prepares for a binding international REDD agreement, it faces the difficulty of managing a “complex mix of federal and state laws on climate and forestry” which complicate REDD application.²⁶⁴ This section outlines the national and local regulations that create the legal framework for Brazil’s REDD programs.

At the national level, Brazil’s government has not enacted any legislation to govern REDD activities specifically.²⁶⁵ Instead, the government looks to existing forestry laws to regulate REDD. The most prominent of these laws is the Federal Constitution of Brazil, which recognizes the importance of cohesion between the multiple levels of government, especially in regards to climate conservation.²⁶⁶ The Constitution emphasizes that both the national government and local communities have a duty to preserve the

257. *See id.*; *see also* CHARLIE PARKER ET AL., *THE LITTLE REDD+ BOOK* 38 (2009) (highlighting how Brazil’s UNFCCC proposal differs from other national REDD proposals); Streck, *supra* note 115, at 11–12, 15 (describing Brazil and Costa Rica’s financial proposals).

258. *See* Marie Calmel et al., *REDD at Project Scale+: Evaluation and Development Guide*, ONF INT’L, 25 (2009), http://www.onfinternational.org/images/stories/information/publications/guide_redd_eng.pdf.

259. Émilie Champagne & Josh Roberts, *Case Study: Brazil*, in *LEGAL FRAMEWORKS FOR REDD*, *supra* note 17, at 125, 125.

260. *See id.*

261. *See id.*

262. *See id.* at 126. *See generally* S. Schwartzman, *Brazil National and State REDD Report*, ENVTL. DEF. FUND (Nov. 2009), http://www.edf.org/sites/default/files/10438_Brazil_national_and_state_REDD_report.pdf (discussing the national and state laws that must coexist for a successful REDD regime in Brazil).

263. *See* Champagne & Roberts, *supra* note 259, at 126.

264. *See* Costenbader, *supra* note 73, at 14.

265. *See* Champagne & Roberts, *supra* note 259, at 126.

266. CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] art. 23 (Braz.), *available at* <http://www.v-brazil.com/government/laws/constitution.html>.

environment.²⁶⁷ It is the responsibility of the “Union, the States, the Federal District and the municipalities to . . . protect the environment and fight pollution in any of its forms [and] to preserve the forests, fauna, and flora.”²⁶⁸

Building on the general duties outlined in the Constitution, Brazil’s national government has introduced two overarching plans to fight climate change and deforestation: The National Plan to Combat Deforestation and Plan to Combat Deforestation at State Level for the Period 2008–2011²⁶⁹ (Deforestation Plan) and the National Plan on Climate Change²⁷⁰ (National Plan).

The National Plan presents Brazil’s strategy for curbing climate change, setting the nation’s first deforestation reduction target, which uses a series of reduction goals to ultimately cut deforestation 70 percent by 2018.²⁷¹ The National Plan envisions using forest monitoring and protection mechanisms, combined with an incentives program, to halt deforestation.²⁷² Thus, while its goal is to reduce deforestation and forest degradation, the National Plan does not use traditional REDD methodologies, such as generating carbon credits, in order to do so.²⁷³ Specific measures call for sanctions on illegal logging, a forest restoration program, and the establishment of a National Public Forests Register to keep track of the protection and management of public forests. In addition, the National Plan advocates the use of a satellite to monitor deforestation in the Amazon.²⁷⁴

The Deforestation Plan delineates both national and state level plans to enhance environmental law enforcement and improve land-titling procedures in the Amazon Basin.²⁷⁵ The Deforestation Plan enacts a number of measures to combat deforestation, including improved forest monitoring and management, and setting aside 20 million ha as

267. *Id.* art. 20.

268. *Id.* art. 23.

269. Decreto No. 6.321, de 3 Novembro 2007, DIÁRIO OFICIAL DA UNIÃO [D.O.U.] de 12.2008 (Braz.); *see also* SCHWARTZMAN, *supra* note 262, at 1 (noting that the Deforestation Plan is an updated version of a high profile law from 2003, entitled the “Action Plan”).

270. Decreto No. 6.263, de 3 Novembro 2007, DIÁRIO OFICIAL DA UNIÃO [D.O.U.] de 12.2008 (Braz.).

271. Champagne & Roberts, *supra* note 259, at 126; *see also* Pedro Piris-Cabezas & Ruben Lubowski, *The Brazilian National Plan on Climate Change: Potential Impacts in a US Cap-and-Trade System*, ENVTL. DEF. FUND, 1 (Nov. 29, 2009), http://cleartheair.edf.org/documents/10563_Brazilian_national_plan_on_climate_change.pdf (noting that the National Plan calls for a phased approach to emissions reductions, with deforestation being reduced 40 percent from 2006–09, and then decrease by another 30 percent every four years until 2017, at which point emissions will have been reduced 71 percent below then 1996–2005 national reference level).

272. Champagne & Roberts, *supra* note 259, at 126.

273. *See* Takacs, *supra* note 186, at 34; *cf.* *Brazil’s Climate Change Plan ‘Ready for Public Scrutiny,’* GUARDIAN (Oct. 8, 2008), <http://www.guardian.co.uk/environment/2008/oct/08/network.conservation> (noting that emissions reductions targets will be met by promotion of sustainable agriculture practices).

274. *See* Griffiths, *supra* note 10, at 49.

275. *See Background Analysis of REDD Regulatory Frameworks, supra* note 80, at 50–51 (noting that while the Deforestation Plan aimed to address deforestation at its roots, the success of the program has yet to be felt in the Amazon).

conservation units.²⁷⁶ In addition, the Deforestation Plan specifically emphasizes the importance of decentralized forest management, with partnerships between federal, state, and local governments “and the establishment of a legal framework for public forest management.”²⁷⁷

In addition to these two prominent plans, Brazil has adopted Federal Law 11.284 on the Management of Public Forests.²⁷⁸ This law promises an allocation of land and resources to be managed by local communities, discussed in further detail in Part II.A.3, which addresses Brazil’s land ownership laws. In addition, the law states that it is forbidden to develop a forestry plan that “commercializ[es] credits derived from avoided emissions of carbon in existing forests.”²⁷⁹ Despite this provision, the Federal law reserves for the states the right to use a commercial carbon market, which is also consistent with Brazil’s international REDD position.²⁸⁰

At the sub-national level, the State of Amazonas has been most active in passing climate change laws. In 2007, the Law for the State Policy for Climate Change was the first state-level climate change law to be passed in Brazil.²⁸¹ This law created a climate change fund “to pay for environmental products and services, including those provided by forest peoples preserving their environment and reducing deforestation,” and established financial incentives for conservation projects in Amazonas.²⁸² Departing from the national stance, the Amazonas state law specifically supports endeavors by the private sector to use market principles in order to offset their emissions.²⁸³ The law gives clear guidelines for how REDD project benefits should be distributed, along with mandating measurements of carbon, protection of forest biodiversity, and baseline levels of GHG emissions from various economic sectors.²⁸⁴ As indicated by the Amazonas state law, the state and national governments in Brazil differ regarding their approaches to financing REDD. Part II.A.2. addresses the financing proposal put forward by Brazil’s national government.

2. Brazil’s Plan for Fund-Based Financing

The Brazilian national government bluntly opposed any REDD scheme that would be linked to the carbon market, and has “repeatedly rejected REDD policies and projects that would offset emissions from industrialized

276. *See id.*

277. *See id.* at 51.

278. Decreto No. 11.284, de 2 de Março 2006, DIÁRIO OFICIAL DA UNIÃO [D.O.U.] de 3.3.2006 (Braz.); *see also* Brazil Public Forest Management Law of 2006, USDA FOREIGN AGRICULTURAL SERVICE GAIN REPORT (Apr. 11, 2006), www.fas.usda.gov/gainfiles/200605/146197843.pdf.

279. *See Background Analysis of REDD Regulatory Frameworks, supra* note 80, at 53.

280. *See id.*

281. Lei no. 3.135, de 4 de Junho de 2007, DIÁRIO OFICIAL DO ESTADO DO AMAZONAS [D.O.A.].

282. Champagne & Roberts, *supra* note 259, at 129.

283. *See id.*

284. *Id.*

. . . countries.”²⁸⁵ Instead of supporting market-based financing for REDD, where credits generated from forest conservation would be traded between countries, Brazil advocates the establishment of a voluntary REDD fund that would be filled with donations from industrialized countries.²⁸⁶ This fund would be completely independent of mandatory emissions reductions targets, so Annex I nations could not use their donations to offset emission reduction obligations under a binding climate treaty.²⁸⁷ The Environment Minister of Brazil issued a public statement announcing that “[f]or Brazil, the efforts made by Developing Countries in order to mitigate climate change through the forest sector need to be additional to the efforts provided by Developed Countries to reduce its emissions.”²⁸⁸

Brazil has created the Amazon Fund to encourage reforestation and other sustainable activities in the Amazon.²⁸⁹ Brazil envisions that the international community will make payments into the fund based on “demonstrable reductions in emissions from deforestation in the previous year against a national reference baseline.”²⁹⁰ Thus far, Brazil’s federal government has pledged \$500 million for the fund,²⁹¹ and the Government of Norway has committed \$1 billion, to be paid from 2008 to 2015.²⁹² Brazil hopes that the fund will generate close to \$21 billion to help combat deforestation in the Amazon.²⁹³

The Amazon Fund is managed by the Brazilian Development Bank (BNDES), and stakeholders include representatives from BNDES as well as local and national government agencies, indigenous groups, and civil society.²⁹⁴ The Fund will issue grants for forest conservation projects, contingent upon the project’s fulfillment of five general criteria. To be eligible for funding, a project must promote the sustainable use of forests, provide for land tenure and territory planning, respect public forests and protected areas, stimulate the conservation and sustainable use of biodiversity, and aid in the recovery of deforested areas.²⁹⁵ As of

285. See Griffiths, *supra* note 10, at 7.

286. See Butler, *supra* note 102.

287. *Id.*

288. See Griffiths, *supra* note 10, at 49 (quoting Marina Silver, the Brazilian Minister of the Environment, speaking at the Midnight Sun Dialogue on Climate Change in Sweden, June 11–14, 2008).

289. See, e.g., *As the Amazon Goes, So Goes the Planet*, AMAZON FUND, <http://www.amazonfund.org/index.php> (last visited Oct. 20, 2011); see also Takacs, *supra* note 186, at 34.

290. See Griffiths, *supra* note 10, at 49.

291. See *id.*

292. See Takacs, *supra* note 186, at 34; see also Daniel Nepstad et al., *The End of Deforestation in the Brazilian Amazon*, 326 *SCIENCE* 1350, 1350–51 (2009) (noting that the significant international contributions to the Amazon Fund create a big opportunity for Brazil to end deforestation practices in the Amazon).

293. See Joshua Goodman, *Brazil Creates \$21 Billion Fund to Slow Amazon Deforestation*, BLOOMBERG ONLINE (Aug. 1 2008, 4:45 PM), http://www.bloomberg.com/apps/news?pid=newsarchive&sid=ahDbiZfuCxZI&refer=latin_america.

294. See Griffiths, *supra* note 10, at 49.

295. See generally SIMON ZADEK ET AL., *THE AMAZON FUND: RADICAL SIMPLICITY AND BOLD AMBITION* (Avina, Working Paper, 2010), available at

November 2010, eight projects, worth a total of \$60 million, have been approved for Amazon funding.²⁹⁶

While Brazil’s international and national stance has been adamantly against the carbon market, at the state level, new climate change laws support the use of linking REDD with carbon credits.²⁹⁷ The State of Amazonas takes full advantage of the provision in the Federal Law on the Management of Public Forests, which preserves the states’ right to utilize the carbon market.²⁹⁸ The Law for the State Policy for Climate Change in Amazonas promotes the use of market instruments in REDD schemes.²⁹⁹ However, the Amazonas Law also includes a state climate change fund to pay for environmental services, such as avoiding deforestation.³⁰⁰

3. Ownership of Forests and Forest Carbon

The Brazilian national government does not currently recognize specific property rights in carbon. It is generally “presumed (but not legally explicit) that whoever owns the rights to use the land above ground would also have rights to the carbon.”³⁰¹ While the government discourages carbon trading on national land, it does allow for carbon market projects on state and privately owned land.³⁰² Thus, one of Brazil’s biggest difficulties in establishing a clear legal framework for REDD is to overcome the “complex layers of regulation and uncertainty over land ownership in the Amazon [that] pose great challenges for the implementation of future REDD projects in Brazil.”³⁰³

Brazil’s Constitution guarantees the right to property, and establishes that private land ownership is permitted.³⁰⁴ Brazil does not have a central land register, however, making it difficult for Brazilians to claim land formally.³⁰⁵ Thus, only an estimated four percent of private land in Amazonia is covered by secure title.³⁰⁶ In an effort to clarify land ownership, the national government has enacted a new law to “regularize” land holdings of up to 1,500 ha.³⁰⁷ Federal Law 11.925, adopted in 2009, allows squatters to become regularized occupants of public lands located in

http://www.brazilworks.org/files/Amazon-Fund_Radical-Simplicity-and-Bold-Ambition_Working-Paper_November2010.pdf.

296. *See id.* at 12.

297. *See* Champagne & Roberts, *supra* note 259, at 129.

298. *See id.*

299. *See id.*

300. *See* Champagne & Roberts, *supra* note 259, at 129.

301. *See* Takacs, *supra* note 186, at 35. *See generally* THIAGO CHAGAS, FOREST CARBON RIGHTS IN BRAZIL (2010) (noting that, absent specific property rights in carbon, REDD programs in Brazil cannot guarantee protection of indigenous property rights).

302. *See* Takacs, *supra* note 186, at 35.

303. *See* Champagne & Roberts, *supra* note 259, at 125.

304. *See* CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] art. 5 (Braz.), available at <http://www.v-brazil.com/government/laws/constitution.html>.

305. *See* Champagne & Roberts, *supra* note 259, at 127.

306. *See id.*

307. Lei No. 11.925, de 17 de Abril de 2009, DIÁRIO OFICIAL DA UNIÃO [D.O.U.] de 4.17.2009 (Braz.).

rural Brazil.³⁰⁸ The government will donate plots of up to 100 ha (247 acres) to land occupants who meet a number of requirements, including that the land occupation began prior to December 1, 2004; occupants use the land for agriculture; and occupants hold the land for at least three years before selling it.³⁰⁹

Although the law aims to “encourage . . . occupants to stay and improve their land instead of abandoning it and moving on to clear the next patch of virgin forest,” it has been criticized for potentially stimulating land grabbing.³¹⁰ “[B]y making it easier to get secure title for dubious land claims,” the law may prompt a demand for land and encourage squatting in the hopes that it might lead to de facto ownership.³¹¹ In addition, the law’s productive use requirements have been denounced because they encourage deforestation practices, causing critics to worry that even if the law clarifies land title, it may do so at the expense of the forest.³¹²

On private land, a landowner has the power to decide when to grant concessions, and a landowner’s permission is required before anyone else can use natural resources.³¹³ However, all rural properties are subject to two governmental limitations that are codified in the Brazilian Forestry Code.³¹⁴ First, Permanent Preservation Areas may be demarcated on either public or private land that has important environmental functions.³¹⁵ Second, owners of forestland must designate 80 percent of their plot as a *Reserva Legal* (Legal Reserve), which can only be improved after the government authorizes a sustainable management plan.³¹⁶

Public lands are administered in accordance with the Law on the Management of Public Lands, which designates that the Union, states, or municipalities must allocate concessions on the land “in the interest of the common good.”³¹⁷ The law guarantees that certain areas of the forest must be managed by local communities.

According to the Brazilian Constitution, all indigenous land is technically the property of the federal government; however, Article 231 recognizes that indigenous groups have a right to “permanent possession” of the land that they traditionally occupy, and have “exclusive rights over the riches of

308. *Id.*

309. See Savaresi & Morgera, *supra* note 172, at 20 (noting that the Brazilian government will also sell larger plots of land (i.e., between 100–400 ha) for a reduced price, provided that the same criteria are met).

310. *The Brazilian Amazon: Preventing Pillage in the Rainforest*, ECONOMIST, Feb. 26, 2009, at 39.

311. *Id.*

312. See Savaresi & Morgera, *supra* note 172, at 20.

313. See Champagne & Roberts, *supra* note 259, at 130–31.

314. Lei No. 4.771, de 15 de Setembro de 1965, DIÁRIO OFICIAL DA UNIÃO [D.O.U.] de 16.9.1965 (Braz.).

315. See *id.*; see also Champagne & Roberts, *supra* note 259, at 127–28.

316. See Champagne & Roberts, *supra* note 259, at 127–28.

317. See *id.*

the soil, the rivers and the lakes existing therein."³¹⁸ In order to ensure that its land rights are protected, an indigenous group must apply to be formally recognized by the Fundação Nacional do Índio (FUNAI).³¹⁹ Once the recognition process is complete, the indigenous group has the "exclusive right to use all the goods on the land, even though the land itself continues to belong to the state."³²⁰ In this manner, indigenous property rights become an usufruct right, allowing an indigenous group to use the "natural wealth of their lands to sustain them and preserve their cultural identity."³²¹

Alternatively, indigenous groups can apply to have their lands be designated as national reserves or protected areas.³²² To do so, an indigenous group would again submit an application to FUNAI, which would then perform an anthropological study and issue a statement to the Justice Department, recommending whether or not the claim should be accepted.³²³ If the recommendation is positive, the Justice Department will order the demarcation of a reserve, thereby granting formal legal protection to the indigenous group.³²⁴ Currently, "indigenous reserves comprise about 20% of the Brazilian Amazon, and . . . are, on average, much better conserved than those outside of reserves and protected areas."³²⁵

4. Benefit Distribution

At the national level, there is no legal framework for benefit sharing in REDD projects.³²⁶ State level REDD programs, however, have utilized Payments for Environmental Services (PES) as a way to reward forest-dwellers for not cutting down their trees.³²⁷ PES is a voluntary transaction wherein a well-defined environmental service is purchased by a buyer from

318. See CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] art. 231 (Braz.), available at <http://www.v-brazil.com/government/laws/constitution.html> (recognizing that indigenous peoples have customary ownership rights on Brazilian lands and natural resources).

319. See Takacs, *supra* note 186, at 35; see also Tom Gibb, *Brazil Authorizes Indian Reserve*, BBC (Apr. 15, 2005), <http://news.bbc.co.uk/2/hi/americas/4450755.stm> (reporting that Brazil set aside an area of 17,000 square kilometers as an indigenous reserve).

320. See Takacs, *supra* note 186, at 35.

321. *Id.*; see also Natalie Unterstell, *Brazil: Maintaining the Resilience of Indigenous Territories*, in REALISING RIGHTS, PROTECTING FORESTS: AN ALTERNATIVE VISION FOR REDUCING DEFORESTATION 22, 22–25 (2010), available at http://www.rainforestfoundationuk.org/files/Accra_Report_English.pdf (noting that the existence of indigenous territories, by their very nature, lowers deforestation rates because the lands are treated as traditional nature reserves).

322. See Takacs, *supra* note 186, at 37.

323. See *id.*

324. See *id.*

325. *Id.* See generally COTULA, *supra* note 180 (supporting customary tenure rights for indigenous groups because they best protect rights and the environment).

326. See *Background Analysis of REDD Regulatory Frameworks*, *supra* note 80, at 50.

327. See, e.g., Sheila Wertz-Kanounnikoff et al., *Reducing Forest Emissions in the Amazon Basin: A Review of Drivers of Land-Use Change and How Payments for Environmental Services (PES) Schemes Can Affect Them* 11–13 (Ctr. for Int'l Forestry Research, Working Paper No. 40, 2008), available at http://www.cifor.org/publications/pdf_files/WPapers/WP41Wertz-Kanounnikoff.pdf (noting that PES-REDD schemes have generally been successful in Latin America, but have not worked as well in other regions).

a provider, if the provider agrees to safeguard the service.³²⁸ PES programs are different from typical command-and-control environmental regulations because they are both voluntary and conditional.³²⁹ Thus, in the REDD context, payments only occur after participants agree to avoid deforestation and after some sort of verification takes place.³³⁰

In Brazil, the most widely publicized PES-REDD program is the Bolsa Floresta Forest Conservation Grant Program (Bolsa Floresta), which was created under the Amazonas State Law for Climate Change. Bolsa Floresta was established to pay forest-dwelling communities for their role in forest protection, and its primary objectives are to avoid deforestation and improve the livelihood of indigenous communities. The program thus rewards indigenous communities who have demonstrated a commitment to avoid deforestation.³³¹

Implemented in September 2007, Bolsa Floresta is managed and financed by the Amazonas Sustainable Foundation (FAS), the public Secretariat for Environmental and Sustainable Development, and Bradesco, which is the largest private bank in Brazil.³³² The FAS received an initial endowment fund of approximately \$23 million, from both governmental and private investors.³³³ In addition, the Marriott International Hotel Chain has agreed to provide funding, with an initial deposit of \$2 million.³³⁴ To receive funds, Bolsa Floresta participants must: (1) have lived on the State Conservation Unit for at least two years; (2) keep crop and pasture areas not larger than those of the year the Forest Conservation Grant Program was instituted; (3) be registered and regularly attend the school, if the families have children; (4) participate in a Community Dwellers Association; (5) participate in the construction and implementation of the Conservation Units and Management Plan, and (6) participate in an introductory workshop and sign an Zero Deforestation Agreement.³³⁵ Importantly, land ownership is not a requirement.³³⁶

As of November 2008, Bolsa Floresta covered six reserves or protected areas in Brazil, and made payments to 2,102 families in Amazonas state.³³⁷ One of the largest REDD projects that utilizes Bolsa Floresta is the Juma

328. Sven Wunder, *Payments for Environmental Services: Some Nuts and Bolts* 3–4 (Ctr. for Int'l Forestry Research, Working Paper No. 42, 2005), available at http://www.cifor.org/publications/pdf_files/OccPapers/OP-42.pdf (recognizing that it is hard to find examples of “true PES,” as many PES schemes are not actually conditional, but instead issue payments in advance based on flexible contracts).

329. *See id.* at 6 (noting that while they offer a stark contrast to command-and-control mechanisms, PES systems can exist with traditional rigid regulations).

330. *See* IVAN BOND ET AL., *INCENTIVES TO SUSTAIN FOREST ECOSYSTEM SERVICES: A REVIEW AND LESSONS FOR REDD* 5–6 (2009).

331. *See* Wertz-Kanounnikoff et al., *supra* note 327, at 13 (explaining how payments are issued to individuals and communities that volunteer to halt deforestation practices).

332. *Id.* at 11.

333. *See* Juma PDD, *supra* note 253, at 47.

334. *See id.*

335. *See* Champagne & Roberts, *supra* note 259, at 133 (noting that these requirements are a part of Brazilian Decree no. 26.958/2007).

336. *Id.*

337. Wertz-Kanounnikoff et al., *supra* note 327, at 11.

Sustainable Development Reserve Project for Reducing Greenhouse Gas Emissions from Deforestation³³⁸ (Juma Project). The Juma Project was the first project to receive Gold Level Certification from the CCB Standards, which estimate that “Juma’s REDD scheme will prevent an estimated 3.6 million tonnes of greenhouse gas emissions . . . over the first crediting period, from 2006 to 2016. By the project’s end in 2050, it is expected to have generated about 190 million tonnes of CO₂e credits.”³³⁹

In addition to these economic benefits, Juma provides payments to indigenous families.³⁴⁰ The majority of the families living in the Juma Reserve do not have formal land titles or personal documentation, yet they are remunerated to protect the rainforest by receiving roughly \$30 per month, which is issued to the female head of each household.³⁴¹ Before they receive payment, families must take a two-day training course that teaches about sustainable land use management.³⁴² Then each family signs a contract, binding them not to cut or burn the trees, which will be supervised by regular inspections. In the event of deforestation, the FAS will stop issuing payments.³⁴³

In addition to paying families, Bolsa Floresta issues payments to family associations, community groups, and social programs. Family associations receive a “cash grant averaging \$500/month per association plus in-kind grant of equipment (such as boat or internet connection).”³⁴⁴ Community Associations receive \$2,500 per year, and social programs are granted approximately \$70,000 per year, in the “form of small investments (for example, in education or health) complementing state and local government programmes.”³⁴⁵ Because the Bolsa Floresta program is relatively new, many of its effects have not been measured or studied. Although Bolsta Floresta has received the CCBA’s Gold Standard designation, it remains to be seen whether the program could be replicated in other parts of the world.

In general, Brazil has successfully incorporated REDD policies into its pre-existing national legal frameworks. In addition to national laws that protect indigenous customary property rights, Brazil has state laws that have allowed for great variation among REDD pilot projects. The most

338. See generally *Juma PDD*, *supra* note 253.

339. Virgilio M. Viana et al., *The Costs of REDD: Lessons from Amazonas*, INT’L INST. FOR ENV’T & DEV., 2 (Nov. 2009), <http://pubs.iied.org/pdfs/17076IIED.pdf>.

340. See *Juma PDD*, *supra* note 253, at 80 (noting that by directing funds towards the female head of each household, the Juma Project aims to combat gender inequality, as well as indigenous inequality).

341. See Wertz-Kanounnikoff et al., *supra* note 327, at 11.

342. See *id.*

343. See *id.* at 12–14; see also *Brazil: Juma Test Case in the Amazon*, WORLD RAINFOREST MOVEMENT, <http://www.wrm.org.uy/bulletin/155/Brazil.html> (last visited Oct. 20, 2011) (noting that some indigenous groups have argued that the Juma Reserve’s monthly payment is not enough to compensate for the loss of livelihood that indigenous groups experience when they stop deforestation practices).

344. Viana, *supra* note 339, at 2 (noting that the Juma Reserve Project was the first voluntary REDD project to receive the Gold Standard designation from the CCBA, in large part because of the Project’s active efforts to fund families and community groups).

345. *Id.*

successful of these projects is the Juma Reserve project, funded by Bolsa Floresta, in the State of Amazonas. Indigenous groups have been compensated for their REDD contributions, regardless of whether they have statutory land rights.

B. Indonesia

This Note will now explore how REDD interacts with indigenous rights in another nation with extreme deforestation, Indonesia. With between 90 and 100 million ha of forestland inside its borders, Indonesia is the third most heavily forested nation in the world, after Brazil and the Democratic Republic of Congo.³⁴⁶ Indonesia's forests sequester approximately 3.5 billion tons of carbon³⁴⁷ and provide livelihood to at least 20 million people.³⁴⁸ Even so, deforestation occurs at alarming rates, as timber concessions, fires, roads, and mining all threaten Indonesia's forests. Exact statistics regarding deforestation in Indonesia are inconsistent; Indonesia's Ministry of Forestry estimates that the country lost 2.83 million ha of forest per year to deforestation between 1997 and 2000,³⁴⁹ while the FAO estimates that Indonesia's annual deforestation rate was 1.87 million ha for the same period.³⁵⁰ Further complicating Indonesia's deforestation data, the World Bank approximates that 28 percent of the country's public forestland is actually devoid of trees.³⁵¹

Regardless of statistical discrepancies, it is widely agreed that Indonesia's forests are in grave danger.³⁵² Recognizing that REDD can be economically and environmentally beneficial, Indonesia's government has acted at both the global and local levels to ensure that REDD becomes a reality. Internationally, Indonesia and Australia have entered into a bilateral

346. See Christopher Barr et al., *Decentralization of Forest Administration in Indonesia: An Overview*, in *DECENTRALIZATION OF FOREST ADMINISTRATION IN INDONESIA* 1, 2 (Christopher Barr et al. ed., 2006); see also *Indonesia's Forests in Brief*, GLOBAL FOREST WATCH, <http://www.globalforestwatch.org/english/indonesia/forests.htm> (last visited Oct. 20, 2011) (noting that Indonesia currently has approximately 98 million ha of forestland, down from 162 million ha in 1950).

347. See Takacs, *supra* note 186, at 46.

348. See Barr et al., *supra* note 346, at 3 (highlighting that 20 million is a conservative estimate).

349. See United Nations Convention on Biological Diversity, Nagoya, Japan, Oct. 18–29, 2010, *Analysis of Information in the Fourth National Reports* ¶ 3(g), UNEP/CBD/COP/10/INF/2 (Oct. 22, 2010); see also Fitriani Ardiansyah, *National Institutional Arrangements for REDD Case Study: Indonesia (as of December 2009)*, WORLD WIDE FORESTS, 2 (Dec. 2009), http://www.theredddesk.org/sites/default/files/resources/pdf/2010/report_7_indonesia.pdf.

350. See *State of the World's Forests 2007*, FOOD AND AGRICULTURE ORG. OF THE UNITED NATIONS, <http://www.fao.org/docrep/009/a0773e/a0773e00.HTM> (last visited Oct. 20, 2011).

351. See Takacs, *supra* note 186, at 46.

352. See generally *REDD in Indonesia: An Independent Monitoring Report by Forest Watch Indonesia* (2009), <http://vh-gfc.dpi.nl/img/userpics/File/REDD/REDD-in-Indonesia.pdf>.

REDD alliance.³⁵³ The Indonesia-Australia Forest Carbon Partnership (IAFCP) was the first developed-developing country partnership to submit a joint proposal to the UNFCCC,³⁵⁴ and together the two countries have implemented a number of REDD pilot projects in Indonesia that are discussed further in Part II.B.4. Domestically, Indonesia is home to approximately twenty voluntary REDD pilot programs.³⁵⁵ Each REDD project uses different rules and regulations, and may be sponsored by NGOs, corporations, or governments.³⁵⁶ In an effort to unify Indonesia’s REDD projects, the national government recently passed legislation specifically related to REDD implementation, making it the first—and only—country in the world to do so.³⁵⁷

Indonesia is an important case study because of its unique national REDD legislation. Implemented amidst an intense political power struggle between the central and provincial governments, Indonesia’s national REDD Law has the potential to clarify the country’s REDD regime, but may also limit indigenous rights and participation.³⁵⁸ In recent history, Indonesia’s administrative authority has shifted back and forth between national and local governments.³⁵⁹ This section explains the effect that decentralization—and recentralization—has had on indigenous rights in REDD, specifically elaborating on how the laws regarding REDD financing, carbon property rights, and REDD benefit distribution have changed in light of the governmental power shift.

1. Indonesia’s Governmental Power Struggle

Indonesia’s national government has historically exercised primary control over the country’s forestry practices.³⁶⁰ After the collapse of the Soeharto New Order regime,³⁶¹ however, government restructuring caused

353. See *IAFCP Factsheet*, AUSTL. GOV’T DEP’T OF CLIMATE CHANGE AND ENERGY EFFICIENCY (Dec. 2009), www.usaid.gov.au/hottopics/pdf/IAFCP_factsheet_2_11Dec09.pdf.

354. See *id.*

355. See Adianto P. Simamora, *Government Delays Awarding Permits for REDD Projects*, JAKARTA POST (Feb. 7, 2009), <http://www.thejakartapost.com/news/2009/02/07/government-delays-awarding-permits-redd-projects.html>.

356. See Beth Askham, *REDD Pilot Projects in Indonesia*, ECOS ONLINE MAG. (Dec. 10, 2010), <http://ecosmagazine.com/paper/EC10048.htm>.

357. P.30/Menhut-II/2009 [Regulation on Reduction of Emissions from Deforestation and Forest Degradation Procedure], May 1, 2009; see also *Background Analysis of REDD Regulatory Frameworks*, *supra* note 80, at 11.

358. See generally Moira Moeliono & Ahmad Dermawan, *The Impacts of Decentralization on Forests and Livelihood*, in *DECENTRALIZATION OF FOREST ADMINISTRATION IN INDONESIA*, *supra* note 346, at 108 (explaining that indigenous groups have more opportunities to participate in local decision-making).

359. See, e.g., Barr et al., *supra* note 346, at 1–3.

360. See *id.* at 1.

361. Soeharto was the authoritarian leader of Indonesia from 1966 to 1998. His government, called the New Order regime, was highly centralized, reserving most of the nation’s power for the President. For further information on the Soeharto regime, see RETNOWATI ABDULGANI-KNAPP, *SOEHARTO: THE LIFE AND LEGACY OF INDONESIA’S SECOND PRESIDENT* (2007) and R.E. ELSON, *SUHARTO: A POLITICAL BIOGRAPHY* (2009).

administrative power to be reallocated to district and local governments.³⁶² This process of decentralization occurred in all aspects of Indonesian law, but had a particularly dramatic impact on the forestry sector, as forest-dwelling communities reestablished control over forestland.³⁶³ Recently there has been a backlash against decentralization. As indicated by the new national REDD legislation, the power pendulum is swinging back towards the central government.³⁶⁴ This section compares Indonesia's forestry laws under decentralized and recentralized regimes, emphasizing how well indigenous rights have been upheld under each.

a. Decentralization and Deforestation

Indonesia's central government took control of the forestry sector in the early twentieth century; as colonization came to an end, and the Ministry of Forestry began nationalizing forestland that was once privately owned by foreigners.³⁶⁵ When Soeharto's New Order regime gained power in 1966, the national government enacted legislation that gave it almost absolute control over Indonesia's forestry practices.³⁶⁶ Under Indonesia's Basic Forestry Law of 1967, for example, the government classified over 143 million ha of forest as public land, disregarding customary land claims and giving the central government sweeping power over approximately one-third of the nation's total forested area.³⁶⁷

The central government's control led to a "forestry crisis" in Indonesia.³⁶⁸ Through the Basic Forestry Law, the Ministry of Forestry granted commercial timber concessions on over 60 million ha of the state-controlled land.³⁶⁹ The central government benefitted from the concessions, as both private and state owned timber companies were required to pay fees and royalties directly to the national government,

362. See, e.g., Barr et al., *supra* note 346, at 1–3; see also Tony Djogo & Rudi Syaf, *Decentralization without Accountability: Power and Authority over Local Forest Governance in Indonesia* (2004), http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/1611/Djogo_Decentralization_040308_Paper565a.pdf.

363. See Barr et al., *supra* note 346, at 2.

364. Christopher Barr et al., *Decentralization's Effects on Forest Concessions and Timber Production*, in *DECENTRALIZATION OF FOREST ADMINISTRATION IN INDONESIA*, *supra* note 346, at 87, 103.

365. See *Country Overview: Indonesia*, in *ENCYCLOPEDIA OF THE NATIONS* (Timothy L. Gall & Jeneen M. Hobby eds., 12th ed. 2007), available at <http://www.nationsencyclopedia.com/economies/Asia-and-the-Pacific/Indonesia.html>.

366. See Barr et al., *supra* note 346, at 1.

367. See Undang-undang Pokok-pokok Kehutanan 5/1967 [Basic Forestry Law], May 1967; see also Takacs, *supra* note 186, at 47 (noting that the central government possessed the decision-making powers to determine which areas should be classified as forest, and to determine commercial licensing and utilization of forest products).

368. Christopher Barr, *Forest Administration and Forestry Sector Development Prior to 1998*, in *DECENTRALIZATION OF FOREST ADMINISTRATION IN INDONESIA*, *supra* note 346, at 18, 28.

369. See Barr et al., *supra* note 346, at 1.

bypassing district governments and local communities.³⁷⁰ As a result of these forestry practices, by 1978 half of the world’s timber was exported from Indonesia,³⁷¹ and from 1985 to 1999 an estimated 1.6 million ha of Indonesia’s forest cover was lost each year due to deforestation or forest degradation.³⁷²

After thirty-two years in power, the Soeharto regime collapsed in May of 1998, leading to “intense political struggles” between Indonesia’s national, provincial, and district governments.³⁷³ As separatist movements sprouted up across the country—especially in resource-rich regions, such as Aceh, Papua, and East Timor—Indonesia’s post-Soeharto leaders recognized that “autonomy for . . . regional governments [was] an unavoidable tradeoff for maintaining Indonesia’s status as a unitary republic.”³⁷⁴ Thus, from 1999 to 2002, the central government enacted legislation to transfer administrative authority from the national government to local leaders in an effort to balance power and “maintain Indonesia’s integrity as a nation.”³⁷⁵ The most significant enactments—Law 22/1999 on Regional Governance and Law 25/1999 on Fiscal Balancing between the Central Government and Regional Governments—did not pertain specifically to forestry; however, by forming the foundation of Indonesia’s decentralization movement, both laws dramatically impacted the forestry sector.³⁷⁶

In addition, the Basic Forestry Law of 1999 was enacted, replacing the 1967 Law.³⁷⁷ The 1999 Law pledged to create a decentralized forest regime that would “accommodate the dynamic of community aspirations and participation, customary and cultural, and social values.”³⁷⁸ District governments eagerly took advantage of the opportunity to control the natural resources within their jurisdictions, and forest-dwelling peoples began to reestablish ownership over land that was under State control during the New Order period.³⁷⁹ After thirty-two years under a centralized regime, district and local actors generally felt it was their turn to benefit from forest resources.³⁸⁰ This feeling of entitlement did not manifest itself

370. See Barr, *supra* note 368, at 24 (explaining how funds were allocated between the central and local governments, with taxes and earmarks that went directly to the central government).

371. See *Country Overview: Indonesia*, *supra* note 365.

372. See Barr, *supra* note 368, at 28.

373. See *id.* at 31.

374. See *id.*

375. See *id.* at 10.

376. See *id.*; see also Takacs, *supra* note 186, at 47 (noting that Indonesia’s Law 22/1999 and Regulation 25/2000 delineate the division of powers between central and local governments, reserving the following decision-making powers for the central government: determining what areas will be classified as forest, setting tariffs and fees for forest resources, allocating commercial permits, and designing criteria for licensing in forests).

377. See Undang-undang tentang Kehutanan 41/1999 [Law on Forestry], Sept. 1999, available at http://www.bkpm.go.id/file_uploaded/Law_4199.htm.

378. *Id.*; see *infra* Part II.B.2.

379. See Barr et al., *supra* note 346, at 2 (noting that indigenous communities felt they had been robbed of their land entitlements under the Soeharto regime, and thus believed they were reestablishing ownership over land that was rightfully theirs).

380. See *id.*

in forest conservation efforts, however. Local governments and communities simply began granting concessions to—and receiving benefits from—small-scale timber companies, rather than implementing practices that would protect the forests.³⁸¹

b. Recentralization and REDD

After three years of extensive decentralization, the central government attempted to regain control of the forestry sector. The Ministry of Forestry claimed that decentralization had “highly damaging” effects on Indonesia’s forests.³⁸² Referencing the Constitution, which states that forests must be managed by the national government to provide sustainable benefits to all Indonesians,³⁸³ the Ministry of Forestry adopted measures to curtail decentralization in 2002.³⁸⁴ It is within this context that the Indonesian Minister of Forestry signed Regulation P.30/2009 on Procedures for Reducing Emissions from Deforestation and Forest Degradation (REDD Regulation) in May 2009, enacting the world’s first “national legal regime for the implementation of REDD projects, and the issuance and trading of carbon credits in respect of the greenhouse gas reductions such projects generate.”³⁸⁵ REDD Regulation grants the national government power over REDD demonstration activities, monitoring and verification mechanisms, and carbon sequestration projects.³⁸⁶

2. Phases of REDD Financing

While it is too soon for effects of REDD Regulation to be analyzed, many indigenous groups have expressed concern that a centralized legal framework will prevent forest-dwelling peoples from participating in and receiving benefits from REDD programs. The remainder of this section examines the interplay between the new REDD Regulation and existing Indonesian laws regarding REDD financing, property rights, and benefit distribution.

Indonesia advocates a phased approach to REDD implementation, both in its domestic legislation and international REDD proposals.³⁸⁷ The three separate stages of Indonesia’s REDD plan—REDD Preparation, REDD Readiness, and Full Implementation—call for different methods of financing.³⁸⁸ Both Preparation and Readiness utilize international REDD

381. *See id.*

382. *See id.*

383. 1945 Constitution of the Republic of Indonesia Aug. 18, 1945, art. 33, available at http://www.humanrights.asia/countries/indonesia/laws/uud1945_en.

384. *See* Barr et al., *supra* note 346, at 1.

385. *See Background Analysis of REDD Regulatory Frameworks*, *supra* note 80, at 11.

386. *See id.* at 12–13.

387. *See* Nur Masripatin et al., *National Strategy: REDD-Indonesia Readiness Phase 2009–2012 and Progress in Implementation*, 11 (Feb. 2010), <http://www.forda-mof.org/uploads/2010/buku%20redd%20versi%20english.pdf>.

388. *Id.*; *see also* Ardiansyah, *supra* note 349, at 12, 17 (noting that Indonesia has also submitted proposals to the FCPF and UN-REDD Program, both of which advocate

funds, while Full Implementation, due to begin in 2012, would be market-based. In this manner, Indonesia’s REDD programs will be using a hybrid method of financing.³⁸⁹

Indonesia’s three-phase REDD approach was developed in conjunction with Australia, through the IAFCP.³⁹⁰ The REDD Preparation Phase took place from 2007 to 2008, as a “quick analysis” on Indonesia’s REDD preparedness, in terms of technological and political capabilities to implement REDD.³⁹¹ After assessing its REDD capacity, Indonesia moved into its REDD Readiness phase, referred to as REDDI.³⁹² This phase is currently ongoing, as Indonesia focuses on capacity building and Demonstration Activities from 2009 to 2012. Both of these stages have been financed from international funds.³⁹³ At the national level, Norway has pledged \$1 billion to Indonesia for Readiness activities. Additionally, Australia donated \$40 million to Indonesia’s REDD fund in 2008, with \$30 million going towards the Kalimantan Forests and Climate Partnership, and \$10 million in a general “bilateral package of support for Indonesia on forests and climate.”³⁹⁴ To build REDD capacity, this money will be allocated in three main areas: “policy cooperation under the UNFCCC and capacity building support; technical support to increase Indonesia’s forest carbon measurement capacity; and identifying and implementing incentive-based practical REDD activities.”³⁹⁵

Indonesia hopes to implement market-linked REDD fully by 2012, in accordance with the expected UNFCCC international legislation. Under its REDD Law, Indonesia advocates a market-based mechanism that would generate tradable REDD credits. Hybrid funding works well in Indonesia because of its weak tenure rights, which will be discussed further in Part II.B.3. Generally, countries “with weak legal, institutional and governance structures [are not] in the position to assure long-term compliance with the requirements of a mandatory market mechanism.”³⁹⁶ Thus, Indonesia’s phased approach, with an emphasis on capacity building, is beneficial as the

implementation of REDD in phases in order to build capacity for REDD markets in developing countries).

389. See Macintosh, *supra* note 123, at 5 (noting that hybrid-based funding uses a combination of market-linked REDD and forestry funds).

390. See *IAFCP Factsheet*, *supra* note 353; see also *Action Under the International Forest Carbon Initiative*, AUSTL. GOV’T DEP’T OF CLIMATE CHANGE AND ENERGY EFFICIENCY, <http://www.climatechange.gov.au/government/initiatives/international-forest-carbon-initiative/action.aspx> (last visited Oct. 20, 2011).

391. See Masripatin et al., *supra* note 387, at 11.

392. See *id.* at 10–13.

393. See *id.* at 10.

394. See *IAFCP Factsheet*, *supra* note 353 (noting that Australia is planning on donating an additional \$40 million for future REDD pilot projects in Indonesia).

395. *Id.*

396. Laura Ximena, *Why Are We Seeing “REDD”? An Analysis of the International Debate on Reducing Emissions from Deforestation and Degradation in Developing Countries*, INSTITUT DU DÉVELOPPEMENT DURABLE ET DES RELATIONS INTERNATIONALES, 18–19 (2007), http://www.iddri.org/Publications/Collections/Analyses/An_0702_Rubio&Wertz_REDD.pdf.

country sorts out its complicated tenure issues before transitioning into market-based REDD.

3. Ownership of Land and Carbon in Indonesia

As mentioned above, the Basic Forestry Law of 1967 allowed the central government to convert 143 million ha of Indonesia's forests to public land, overriding the customary land rights of indigenous communities who had been living in the forests for generations.³⁹⁷ Indigenous groups protested against forestry practices that gave State interests precedence over customary rights, changing the legal status of forests from *adat*,³⁹⁸ or customary lands, to State land without informing or receiving consent from indigenous groups.³⁹⁹

In part because of indigenous community protests, post-Soeharto leaders determined that the 1967 Basic Forestry Law was not "compatible" with the goal of "sustainable forest management . . . able to accommodate the dynamic of community aspirations and participation, customary and cultural, and social values in accordance with national norms."⁴⁰⁰ Thus, the government enacted the Basic Forestry Law of 1999 (Law 41/1999) in order to replace the 1967 law of the same name. Although its rhetoric recognizes "customary law communities" and ensures "compensation if indigenous communities' traditional areas become designated as national forest areas," Law 41/1999 is similar to its predecessor in that it vests exclusive authority over untitled forestland in the national government, without any special provision for the ownership rights of indigenous peoples.⁴⁰¹ Further, Law 41/1999 allows the State to issue concessions over any forestland at its discretion.⁴⁰² An "official elucidation" accompanying Law 41/1999 emphasized the "far-reaching authority" of the national government:

[T]he Nation gives the [Central] Government authority to organize and regulate everything associated with forests, the forest estate, and forest products; to define the forest estate and/or change the status of the forest estate; to define and regulate legal relationships between people and forests or the forest estate and forest products; and to control the formulation of laws related to forestry. *Therefore, the [Central]*

397. See *supra* note 367 and accompanying text.

398. See Barr et al., *supra* note 346, at xiv (defining *adat* as rights and communities based in rights that are "customary or traditional, a rich and complex concept touching on law, tenure, religion, symbolism, practice, and ethnicity").

399. *Indonesian Indigenous Peoples Question New Forestry Law*, WORLD RAINFOREST MOVEMENT, <http://www.wrm.org.uy/bulletin/23/Indonesia.html> (last visited Oct. 20, 2011) (stating that, according to the Alliance of Indigenous Peoples of the Archipelago, the 1967 Basic Forestry Law allowed the government to "unilaterally seize[] control of tens of millions of hectares of customary forest lands which have been handed down . . . , owned, controlled and managed by . . . Indonesia's indigenous peoples").

400. Law on Forestry, *supra* note 377.

401. See *id.*

402. *Id.*

*Government has authority to allocate rights and permits to other parties to carry out activities in the field of forestry.*⁴⁰³

Despite the absence of national *adat* recognition, some district governments have issued decrees recognizing *adat* forestry rights.⁴⁰⁴ The system is generally marked by a lack of legal clarity, however, undermining most indigenous peoples’ claims to forestland. *Adat* lands are “generally unmapped and not protected by statutory law.”⁴⁰⁵ Additionally, the protection of *adat* rights has been difficult because outsiders are generally not aware of—or choose to ignore—*adat* claims.⁴⁰⁶ To have their *adat* claims recognized, indigenous groups generally try to reconstruct history. Although this “contest over time and place” is the most common way to legitimize *adat* claims, it is not very effective, as Law 41/1999 does not allow indigenous groups to gain formal title over land via adverse possession.⁴⁰⁷ Unlike in Brazil, groups cannot acquire title to land by “improving” a plot of land through farming or other development.⁴⁰⁸

Proponents argue that this system removes a major incentive for deforestation and simplifies the allocation of property rights. Critics, on the other hand, note that this is potentially harmful to indigenous peoples, since untitled land will always belong to the State, thus removing any possibility that the customary land rights of indigenous peoples will be respected. The United Nations Committee on the Elimination of Racial Discrimination (CERD) has repeatedly urged Indonesia to review its laws “to ensure that they respect the rights of indigenous peoples to possess, develop, control and use their communal lands.”⁴⁰⁹ As a result, the new Law has generated much controversy, and Indonesia’s forestry practices continue to be criticized by indigenous communities.⁴¹⁰

Although *adat* communities believe that their customary land rights should be recognized out of principles of equity, they do not necessarily advocate the best environmental policies. Many indigenous groups want title to their land so that they can receive benefits from timber concessions.⁴¹¹ Current legislation in Indonesia does not recognize a

403. John McCarthy et al., *Origins and Scope of Indonesia’s Decentralization Laws*, in *DECENTRALIZATION OF FOREST ADMINISTRATION IN INDONESIA*, *supra* note 346, at 33, 44–45, (emphasis added) (quoting official elucidation of Law 41/1999).

404. *Id.*

405. Moeliono & Dermawansupra, *supra* note 358, at 112. *See generally* Max Gluckman, *Adat Law in Indonesia* 31 J. COMP. LEGIS. & INT’L L. 60, 63 (1945).

406. *See generally* Gamma Galudra et al., *Hot Spot of Emission and Confusion: Land Tenure Insecurity, Contested Policies and Competing Claims in the Central Kalimantan Ex-Mega Rice Project Area* (World Agroforestry Ctr., Working Paper No. 98, 2010), available at <http://www.worldagroforestry.org/downloads/publications/PDFs/WP16601.pdf>.

407. Moeliono & Dermawansupra, *supra* note 358, at 112.

408. *Id.*

409. *Concluding Observations of the Committee on the Elimination of Racial Discrimination: Indonesia*, ¶ 17, U.N. Doc. CERD/C/IDN/CO/3 (2007).

410. *Indigenous Peoples Question New Forestry Law*, *supra* note 399.

411. Moeliono & Dermawansupra, *supra* note 358, at 112 (“While *adat* communities clearly would like to have rights over their ancestral territories and forest resources formally recognized under Indonesian law, this does not always mean that such groups are willing and capable to manage and protect these resources in a sustainable manner . . . many customary

separate property right in forest carbon, but rather grants carbon ownership to the owner of forestland.⁴¹² Thus, there is a great opportunity for incentive-based REDD schemes to reward *adat* communities for becoming stewards of the forests, and the carbon stored within them. Because of the controversy over indigenous tenure rights, however, REDD benefits often bypass *adat* groups.

4. Distribution of Benefits

Indonesia's decentralization movement began in large part because of local communities' insistence that they receive an equitable distribution of forest benefits.⁴¹³ As the national government aims to recentralize forestry practices, including REDD, local groups fear that they will once again be pushed aside. The national government is currently entitled to take 30 percent of all credits issued in Indonesian REDD projects, in order to manage its own national and international REDD commitments.⁴¹⁴ This money is frequently not seen by indigenous communities. The remaining 70 percent of REDD revenue is supposed to be given to regional governments, who allot some money to a "Reforestation Fund" and distribute the rest to the community, either via community services or direct payments.⁴¹⁵ Frequently, the money is tied up as governments spend time negotiating how the money will be distributed, and local peoples do not see the benefits.⁴¹⁶

The money that is distributed to local communities is generally in the form of PES payments. Because decentralization reforms in Indonesia have led to local communities negotiating with timber companies for logging agreements,⁴¹⁷ PES distribution seems as though it would be an ideal way to implement REDD. However, because of weak customary tenure rights and the persistence of commercial loggers who are willing to pay indigenous groups who lack formal land title, PES frequently does not work in Indonesia.⁴¹⁸ Instead of enticing communities to stop logging, PES entices timber companies to offer more money for deforestation services. Unintentionally, PES in Indonesia is competing with—and losing to—industrial scale timber companies.⁴¹⁹

communities use *adat* claims as a strategy to protect forests, many also feel it is easier to sell exploitation rights for a share in the revenue.”).

412. Takacs, *supra* note 186, at 46.

413. *See supra* note 379 and accompanying text.

414. *See* Takacs, *supra* note 186, at 46 (“Over the past year, Indonesia’s Ministry of Forestry has developed a series of decrees defining how REDD activities should be carried out and evaluated [including] . . . Permenhut No 36/2009 [that] . . . regulates REDD projects with defined revenue sharing allocations for local communities, project developers, and the different levels of government . . . based on the project and forest type.”).

415. *See id.* at 47.

416. *See id.*

417. *See generally* Stefanie Engel, *Payments for Environmental Services as an Alternative to Logging Under Weak Property Rights: The Case of Indonesia* 65 *ECOLOGICAL ECON.* 799 (2008).

418. *See id.*

419. *See id.* at 800.

Both Brazil and Indonesia face unique struggles as they implement their national REDD legal frameworks. However, the lessons that can be learned from both nations' experiences are universal.

III. REALITIES OF REDD: HOW TO BEST PROTECT INDIGENOUS RIGHTS IN THE GLOBAL REDD REGIME

Although the majority of REDD research has focused on policy practices thus far,⁴²⁰ the legal implications of REDD deserve more scrutiny, as national laws will directly influence how REDD is practiced on the ground.⁴²¹ As explained in Part I, protection of indigenous rights is crucial in REDD programs, not only because of international human rights obligations, but also because REDD will not be successful without the cooperation of the forest-dwelling peoples who choose whether or not to cut down trees on a day-to-day basis.⁴²²

Part III begins by addressing the threshold question of whether a national legal framework is necessary for rights protection in REDD. After answering that question in the affirmative, Part III then makes specific recommendations for REDD national legal frameworks, based on Part II's comparison of REDD regulation in Brazil and Indonesia.

A. National Legal Frameworks Are Crucial to Rights Protection in REDD

Since REDD reached the forefront of climate change negotiations in 2005, the international community has agreed upon vague REDD regulations that will govern avoided deforestation projects in the post-Kyoto protocol commitment period.⁴²³ Although its inclusion in Kyoto's successor is regarded as a foregone conclusion, REDD policy remains uncertain.⁴²⁴ REDD is currently a clutter of inconsistent pilot projects, causing its practical realities to vary. One common theme of REDD programs, however, is that their effects on indigenous communities are determined by pilot project policies, rather than the obscure language on safeguards that is found in international agreements.⁴²⁵

At 2010's COP-16, UNFCCC negotiators seemed to recognize that one international REDD agreement will not fit all national REDD scenarios, and emphasized the important role that State laws play in establishing comprehensive REDD plans.⁴²⁶ The Cancun Accord encourages each country that participates in REDD activities to develop national REDD regulations, emphasizing the need for each State to develop a national reference level of GHG emissions from deforestation, a national forest monitoring system to measure changes in forest cover, and national

420. See Iza, *supra* note 17, at ix.

421. See Iza, *supra* note 17, at ix.

422. See *supra* Part I.D.

423. See, e.g., *Cancun Accord*, *supra* note 61; *Copenhagen Accord*, *supra* note 24.

424. See *supra* notes 54–70 and accompanying text.

425. See *supra* Part I.C.

426. *Cancun Accord*, *supra* note 61, § C, ¶ 71(a)–(d).

safeguards to protect the rights of indigenous peoples.⁴²⁷ Although the Cancun Accord's guidelines for rights safeguards are vague, they seem to acknowledge the precarious situation that indigenous groups are currently in as a result of REDD.⁴²⁸ Because international agreements do not provide strong language regarding rights protections, indigenous groups are frequently at the mercy of REDD pilot projects run by private companies who are not bound by international human rights laws.⁴²⁹ Currently, most voluntary REDD projects are contract based, causing indigenous peoples to be subject to terms and conditions of agreements that they may not understand.

National governments, on the other hand, are required to respect international treaty obligations. The right to property can be found in the Universal Declaration on Human Rights, which, although non-binding, is a cornerstone of rights protection and is respected across the globe.⁴³⁰ Additionally, the United Nations Declaration on the Rights of Indigenous Peoples specifically mentions that indigenous groups have the rights to property and the right to "free, prior, and informed consent."⁴³¹ Most of the world has signed UNDRIP, demonstrating some level of respect for indigenous rights. Further, ILO Convention 169 promotes the indigenous right to self-determination.⁴³² Although only ratified by twenty nations, ILO 169 is an influential document that impacts the way governments—not private companies—treat indigenous groups. Because their fundamental rights are best protected by national governments with treaty obligations, indigenous groups are best served by national REDD frameworks that turn the principles of human rights documents into practice.⁴³³

In addition, the lives of indigenous peoples are more directly impacted by national laws than by international agreements.⁴³⁴ As evidenced by the discussion of Brazil and Indonesia, national decrees impact the property rights and benefit disbursement that accompany REDD programs.⁴³⁵ Regardless of the text of international agreements, these specific national laws change the way forestry practices occur on the ground. Indigenous peoples are subject to national law enforcement and national benefit sharing arrangements. Thus, it is through domestic legal frameworks that true rights safeguards can be implemented, as the domestic laws will have more of an effect on the day-to-day lives of forest-dwelling peoples.

Further, indigenous groups' opportunities for participation in REDD schemes is greater at the national level than it is at the international level. The smaller the scale of REDD programs, the more likely indigenous

427. *Id.*

428. *See id.*

429. *See* Chestney, *supra* note 217.

430. *See* Universal Declaration on Human Rights, *supra* note 168.

431. UNDRIP, *supra* note 156, art. 10.

432. *See* ILO 169, *supra* note 150.

433. *See supra* notes 150–60.

434. *See supra* notes 243–45.

435. *See supra* Part II.

peoples’ voices will be heard during planning and design stages.⁴³⁶ Given this greater opportunity for free, prior, and informed consent, indigenous rights will inherently be better protected than they would absent national REDD legislation. Bolivia, for example, protested the vague rights language in both the Copenhagen and Cancun Accords.⁴³⁷ By developing a domestic REDD framework, however, Bolivia can implement tough laws to uphold indigenous freedoms.

Overall, international REDD agreements do not adequately protect indigenous rights because they use weak language and do not allow for sufficient indigenous participation at the negotiation level.⁴³⁸ Project-level REDD contracts also cannot offer rights protection, as they are generally signed between big companies and governments who are focused on the economics, rather than the equality, of REDD. Thus, national regulations offer indigenous groups the best chance of rights protection. Because they are obligated to uphold human rights agreements, make laws that directly impact indigenous peoples, and offer the greatest opportunity for indigenous participation during the planning and design stages of REDD, national governments can protect indigenous freedoms by creating specific legal frameworks to uphold rights in REDD.

*B. Recommendations for a Legal Framework
that Best Protects Indigenous Rights*

Having argued that indigenous rights in REDD will be best protected under national legal frameworks, Part III now offers suggestions for the development of a pro-rights REDD regime. Reflecting on lessons learned in Brazil’s and Indonesia’s REDD experiences, Part III.B makes recommendations regarding forest governance, REDD financing, property rights, and benefits distribution.

1. Financing

Both Brazil and Indonesia use hybrid mechanisms for funding. Although Brazil’s government advocates a fund-based approach to REDD, in actuality, Brazil’s federalist system of government uses a hybrid mix.⁴³⁹ The state pilot projects use market-based REDD in order to generate more money for REDD projects, while the national government creates international voluntary REDD funds.⁴⁴⁰ Thus, in Brazil both methods—fund- and market-based—are being used simultaneously. Indonesia, by contrast, utilizes hybrid funds in a phased approach. Indonesia currently

436. *See supra* Part I.C.3 (discussing how indigenous rights are better protected under sub-national and hybrid approaches because they are on a smaller scale than national approaches).

437. *See supra* notes 61–70 and accompanying text.

438. *See supra* notes 70–72 and accompanying text.

439. *See supra* Part II.A.2.

440. *See supra* Part II.A.2.

uses fund-based financing, but looks towards market-based funds in the future.⁴⁴¹

The benefit of Indonesia's version of hybrid funds is that the nation is able to implement capacity-building programs now, to address issues of weak forest governance.⁴⁴² This should help protect indigenous rights throughout the REDD regime because rights issues will be taken care of before REDD is fully implemented. While capacity building is essential to rights protection in REDD, Brazil's hybrid approach is ultimately stronger than Indonesia's. By allowing for market-based REDD at the project level, Brazil is able to generate enough funds to implement REDD fully.⁴⁴³ In addition, by ensuring that there is a national REDD fund, supported by the international community, Brazil is both creating a deeper pocket for its REDD program and creating built-in rights protection. Because the REDD fund is monitored by the international community, there likely will be more scrutiny regarding how the funds are allocated, ensuring that there is equitable distribution to forest-dwelling peoples.

2. Property Rights

It is essential that each nation has a clear forest tenure system in place before implementing REDD.⁴⁴⁴ Many countries are like Brazil and Indonesia, with both statutory and customary land rights. To ensure that REDD respects indigenous rights to land and resource ownership, it is essential that the legal framework clearly addresses a dual system of rights. While clear tenure is imperative, a specific right in forest carbon is not necessary for a successful REDD regime. Neither Brazil nor Indonesia recognizes a separate property right to forest carbon, and instead base their forest carbon rights on land rights.⁴⁴⁵ Indonesia's indigenous communities are not respected under REDD because their *adat* claims are generally not recognized in the country.⁴⁴⁶ In Brazil, however, customary land rights are recognized. Indigenous groups can create reserves, on which they have ownership rights.⁴⁴⁷ Additionally, Brazil's REDD benefit distributions are not all based on land rights.⁴⁴⁸ Thus, indigenous groups can benefit from REDD programs even without recognized tenure.

3. Benefits Distribution

As mentioned above, both Brazil and Indonesia are experimenting with a system wherein REDD benefits are distributed via PES systems. In Indonesia, a weak tenure system and governmental corruption have resulted

441. *See supra* Part II.B.2.

442. *See supra* Part I.D. (discussing the importance of capacity building in indigenous rights).

443. *See supra* Part II.A.

444. *See supra* Part II.A.3.

445. *See supra* Parts II.A.3, II.B.3.

446. *See supra* Part II.B.3.

447. *See supra* notes 322–325.

448. *See supra* Part II.A.4.

in a bidding war between PES payments and logging companies.⁴⁴⁹ While some *adat* communities have benefitted financially from this arrangement, the environment is not protected.⁴⁵⁰ In Brazil, payments are contingent upon environmental services, rather than land rights. Because of this, indigenous peoples have greater opportunity to benefit from REDD. A highlight of Brazil's system is that it distributes payments to both individuals and communities, thereby promoting sustainable lifestyles on all levels.⁴⁵¹

To ensure that the above safeguards are in place, there should be an independent monitor to assess the rights situation in each nation before it can receive REDD funding, similar to the system that currently exists under the voluntary CCB standards. If the above recommendations are followed, REDD can be a win-win situation for both biodiversity and the indigenous peoples who inhabit the earth.

449. *See supra* Part III.B.4.

450. *See supra* Part III.B.4.

451. *See supra* Part III.A.4.