## LAW, TROPICAL FORESTS AND CARBON

Emerging from the scientific parameters underpinning REDD+ (including the measurement of carbon stocks, reporting and verification), *Law*, *Tropical Forests and Carbon* considers the crucial challenges for global and national governance and the legal rights and interests of indigenous people and local communities, all of which have fundamental implications for development and poverty alleviation. With contributions from leading experts in the fields of law, governance, science, development studies and geography, it sheds light on the complexity of REDD+ and offers perspectives on the extent to which REDD+ agreements can be enforced under international law and in concert with new private and public domestic institutions.

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# LAW, TROPICAL FORESTS AND CARBON

The Case of REDD+

Edited by ROSEMARY LYSTER, CATHERINE MACKENZIE AND CONSTANCE MCDERMOTT



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## PREFACE

The rapid loss of tropical forests has gained increasing international attention over the past half century, driven by diverse concerns including the role of tropical forests in conserving biodiversity, supporting traditional cultures and providing livelihoods to over 1 billion of the world's poorest people. However, it is the linkage of tropical forests with carbon emissions that has transformed tropical forest loss into a subject of international climate law. The specific vehicle for this transformation is Reducing Emissions from Deforestation and Degradation and forest enhancement (REDD+), a mechanism formally adopted under the United Nations Framework Convention on Climate Change (UNFCCC) at the Thirteenth Conference of the Parties (COP 13) in Bali. The core logic of REDD+ is simple. Developed countries, as the parties primarily responsible for climate change to date, will pay developing countries to keep their forests standing and hence reduce emissions from forest carbon loss. This simplicity, however, masks the myriad complexities of international and domestic law, tropical forest governance, and the science of tropical forests and carbon, all of which underpin the ability of different countries and stakeholders to implement effectively and equitably, and benefit from, REDD+.

This book, *Law, Tropical Forests and Carbon: The Case of REDD+*, provides a road map through this complexity. It brings together the disciplines of law, governance, science, development studies and geography to investigate thoroughly, analyse critically and explain the parameters of REDD+ schemes, and to elucidate their challenges. The book 'steps back' from much of the REDD+ rhetoric to provide an in-depth academic analysis of the complex interactions of all of these disciplines when attempting to implement internationally sanctioned REDD+ schemes. Emerging from the scientific parameters underpinning REDD+, the book considers the crucial challenges for law and governance in an era of globalisation, involving actors at multiple scales, public and private institutions and crosssectoral challenges. These challenges include: global and national governance and the legal rights and interests of indigenous people and

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local communities, all of which have fundamental implications for development and poverty alleviation. The book also offers perspectives on the extent to which REDD+ agreements can be enforced under international law and in concert with new private and public domestic institutions. The contributions of the authors are arranged into three parts, namely: Part I 'Framing the problem: perspectives from law, science and governance'; Part II 'Operationalising REDD+'; and Part III 'Securing the rights of forest dwellers'.

The chapters in Part I set the stage with an overview of the legal, scientific, socio-economic and political parameters within which REDD+ has evolved. This begins with Chapter 1 by Rosemary Lyster, which analyses the international legal frameworks for REDD+. In addition to outlining key legal instruments and decisions, Lyster highlights the challenges REDD+ institutions face in ensuring legitimate and credible outcomes, not only in terms of real carbon reductions, but in 'safeguarding' all the other forest values, including biodiversity and the welfare of indigenous and other local communities.

In Chapter 2, Yadvinder Malhi and Toby R. Marthews review current scientific knowledge on the role of tropical forests in moderating climatic change at global to local levels, and in supporting global biodiversity. Based on this review, they then critically consider the potential for REDD+ to serve the twin goals of climate-change mitigation and biodiversity conservation.

Valerio Avitabile in Chapter 3 then assesses the knowledge and uncertainties surrounding the measurement of tropical forest carbon stocks. REDD+, if it is to pay for real and verifiable emissions reductions that are additional to 'business as usual', hinges on the accurate measurement of carbon fluxes. Inaccurate or inconsistent measurements could create numerous perverse effects, including payments or crediting for reduced forest loss that: lacks 'permanence' (i.e. is not maintained over time); allows 'leakage' (i.e. simply displaces deforestation to other regions while failing to reduce net loss); lacks 'additionality' (i.e. is not additional to what would have occurred without REDD+). All of these perverse effects would undermine global efforts to mitigate climate change, particularly if false carbon accounting for REDD+ reduced global incentives to cut fossil fuel emissions.

Thomas K. Rudel's Chapter 4, 'The Quiet Woods', takes a step back from global concerns for standardised approaches and measurements, to consider the socio-economic realities within countries that have thus far retained the largest percentage of their tropical biome in forest. Looking

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into the future, Rudel proposes that it is these countries – which include some of the least developed and poorest world regions – that will experience the greatest changes from ongoing pressures of globalisation and may be the least well situated to benefit from REDD+ as currently envisioned. He argues that for these countries the current focus of REDD+ on carbon flows in the form of reduced emissions is not appropriate. Rather a 'stock approach' should be considered that compensates countries for maintaining their forests intact.

Chapter 5 by Constance McDermott then examines REDD+ through the lens of 'multi-level governance'. She argues that REDD+ must be understood as only one mechanism of societal 'steering' among many and that it co-exists and interacts with a wide range of other institutions and priorities that shape global to local forest outcomes. The chapter begins with an historical overview of tropical forest governance, starting with the development of traditional systems of tropical forest use, followed by colonisation and state-building, to the current era of market globalisation and global environmentalism. The chapter highlights how this complex historical trajectory has generated power struggles within and among governments, as well as between governments and local stakeholders, leading to conflicting land-use laws, ineffective enforcement and widespread corruption. The author argues for designing REDD+ interventions in ways that complement the overall objective of improved forest governance rather than simply adding layers of contradictory demands.

Following Part I's framing of REDD+, Part II addresses the specific mechanisms necessary to 'operationalise' REDD+. This begins with Chapter 6 by Charlotte Streck, which confronts the core question of how REDD+ will be financed. She reviews different existing and proposed strategies for assessing the cost of REDD+, determining who should pay, and deciding which institutions should be responsible for managing and monitoring REDD+ payments. Streck argues that, contrary to the early optimism of many REDD+ supporters, the implementation of REDD+ will be neither fast nor easy and requires addressing the underlying structural drivers responsible for forest loss. Under the UNFCCC, REDD+ is to be implemented in phases, with Phase I and II involving support for REDD+ countries in designing and implementing the necessary governance and accounting frameworks, while Phase III involves strictly 'performance-based' payments for REDD+. Streck argues that many countries will require Phase I and II support for years to come before they will be ready for Phase III.

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Chapter 7, authored by Catherine MacKenzie, considers how legislation can best support the implementation and enforcement of REDD+. To do this, it discusses the development of international forest law in the period since the late 1980s. It then discusses key features of REDD+ schemes, discusses the role of cooperation in the implementation of these schemes, and suggests principles of forest law and governance which have emerged since 1992 and which are likely to be central to the successful implementation of REDD+. Building on earlier work by Cashore and Humphreys, which suggested that for negotiations to be successful, the aims of all parties should be considered, it emphasises the importance of transparency and accountability in designing and implementing REDD+ projects. This is significant because the repeated failures of the international forest regime since 1992 provide insights that may inform the design, implementation and enforcement of REDD+.

Enforcing REDD+ depends on effective systems for measuring, reporting and verification (MRV), a point explored in depth by Ben DeVries and Martin Herold in Chapter 8. Without precise and credible MRV systems, it will not be possible to compensate REDD+ countries efficiently, effectively and equitably for emissions reductions. Precise measurements are also of core importance if private financiers are going to take the risk of investing in REDD+ activities. Chapter 8 reviews the various options for REDD+ MRV, including advances in optical and other forms of remote sensing as well as the use of field-based methods.

Part III, the final segment of the book, focuses at the scale of local forest dwellers, considering the challenge of securing local rights in the context of implementing REDD+. Robert Fisher and Rosemary Lyster in Chapter 9 consider the issue of land and resource tenure as central to determining the impacts of REDD+ on indigenous peoples and other local communities. They view REDD+ as a 'double-edged' sword for local tenure. Some indigenous communities have been strongly opposed to REDD+ from the start, considering it as the latest example of western imperialism and the 'commodification of nature'. This will only restrict their freedom to continue traditional forest practices and lead to 'land grabbing' by 'carbon cowboys' eager to capitalise on REDD+ revenues. The authors argue that REDD+ should lead to tenure reform which recognises traditional land rights and promotes community-based forest management. At the same time they caution against the potential of REDD+ to lead to a re-centralisation of control over forest resources.

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Chapter 10 by Jeff Neilson and Beria Leimona examines the role of payments for ecosystem services (PES) in Indonesia. PES is regarded as a core policy tool for REDD+ efforts at the project level and arguably underpins the global logic of REDD+ as well. They review PES using contrasting insights from environmental economics and political ecology. The origins of PES can be traced to environmental economics which views environmental problems as essentially 'market failures' involving the lack of a market price for environmental services. Political ecologists in contrast, highlight that markets are not 'power neutral' and that the impact of market interventions such as PES will depend heavily on the overall legal and social structures in place that mediate them. Their analysis of REDD+ activities in Indonesia suggest that project-level PES may help reform forest governance at the local level even in the absence of broader policy change. However, higher-level government recognition may be necessary if REDD+ PES activities are to scale up in the manner required to significantly address forest loss.

Chapter 11 by Leo Peskett considers the overall human development implications of REDD+, with a particular focus on the poor and most vulnerable. This includes an assessment of the possible poverty impacts of core REDD+ policy approaches, including performance-based financial payments linked to carbon markets, the application of standards and environmental and social safeguards, and the scaling up of REDD+ projects to the national level. Peskett critiques the assumption of a REDD+ 'rent' in the form of additional financial benefits for the poor. He argues that it is highly unlikely that REDD+ will provide sufficient revenues to exceed the costs of forgoing livelihood activities that involve forest clearing, particularly for the landless and most socially disadvantaged. Peskett concludes that for REDD+ to make significant contributions to development and poverty alleviation, it must be linked with broader efforts to transition into a green economy and sustainable systems of global trade.

In Chapter 12, Simon Butt, Beatriz Garcia, Jemma Parsons and Tim Stephens provides case studies of two countries' efforts to implement REDD+ and to deal with the many issues that have been identified by the preceding authors. Those countries are Brazil and Indonesia. Brazil and Indonesia provide critical, and contrasting, examples of countries with vast expanses of tropical forest and historically very high deforestation rates. Each has taken a different approach to REDD+ reflecting different historical contexts. Both countries face challenges in designing

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national frameworks for REDD+ that will comprehensively address the wide range of regulatory issues associated with reducing forest carbon emissions including the imperatives of MRV. Both countries also face the challenges of federalism, and the need to negotiate the correct balance of centralised and decentralised REDD+ governance. In the case of Brazil, the Amazonian states have served as key promoters of REDD+, developing innovative strategies to implement state-wide REDD+ programmes and pressuring the federal government to support REDD+ at the international level. Indonesia, while likewise generating many innovative REDD+ activities, has been impeded in its development of coherent national policies by conflicts among ministries – conflict exacerbated by the fragmented approach of bilateral and international funders.

In sum, the interdisciplinary analysis provided by this book highlights the many opportunities and challenges that accompany the concept of REDD+ as a 'simple' financial mechanism to keep tropical forests standing, The sum total of these analyses reveal REDD+ not as a simple 'quick fix' but rather a highly ambitious goal fraught with complexity and challenge, as well as tantalising potential. The integration of knowledge from all disciplines, from the legal to the social to the natural scientists, will be necessary both to enrich our understanding of how REDD+ unfolds and to make informed decisions about its design. However, for REDD+ to lead to lasting and positive change for the climate, tropical forests, biodiversity and forest communities, the learning it engenders must be shared among all stakeholders beyond the relatively narrow bounds of academia or the REDD-focused policy community. In particular, it must engage with the range of actors driving deforestation, from global consumers to multinational agribusinesses as well as learn from the untold numbers of forest communities whose livelihoods stand in the balance.

The co-editors would like to thank all the authors for their insightful contributions to this work, which for the first time brings together a range of disciplines to offer unique and critical perspectives on REDD+. The co-editors have deliberately not over-edited the work. Rather they have allowed the text of the many experts in the field to remain as stand-alone chapters, albeit that the result is some overlap between each of their contributions. The co-editors would also like to thank the many people who have reviewed each of these chapters prior to publication. They include, in chapter order, Gary Cox, David Galbraith, Alex Held, Patrick Meyroidt, Harro van Asselt, Andrew Hedges, Tim Stephens, Michael Schmidt, Jeffrey Hatcher, Robert Fisher, David Brown, Caroline Schmidt and Mari

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