Analysing REDD+

Challenges and choices

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Chapter 1

Introduction

Arild Angelsen, Maria Brockhaus, William D. Sunderlin and Louis V. Verchot

1.1 Taking stock of REDD+

REDD+, as an idea, is a success story. It has generated excitement about possibilities for getting underway on climate change mitigation quickly and cheaply. REDD+ has also been broad enough to serve as a canopy under which a wide range of actors can grow their own trees. It has been through an intensive process of conceptualisation, design and implementation – even if it is still far from realising its fundamental goal, namely large-scale emission reductions. No idea for saving the world's tropical forests has generated anywhere near the same excitement and commitment of funds as has REDD+.

However, to scientists and professionals with experience in tropical forestry, it is not surprising that REDD+ has turned out to be much harder to implement than expected. Deforestation and forest degradation have a long history and powerful interests have much at stake in their continuation. The policy arenas in many countries are battlefields between interests of 'business as usual' and interests of transformational change. But this is also a good sign: those who benefit from business as usual take REDD+ seriously enough to react: this indicates that REDD+, if implemented, can have an impact.

REDD+ sets out to solve a fundamental collective action problem: to create a system that provides forest users with economic incentives that reflect the value of the carbon sequestered and stored in trees. Building that system is an ambitious political, economic and social engineering project. Establishing a payment for ecosystem services (PES) mechanism seeks to create a link between a global 'willingness to pay' and individual forest users in faraway villages. This is the challenge facing governments and project proponents trying to make live trees more valuable than dead ones.

REDD+ is evolving in the absence of a new international agreement on climate change. In the run up to COP15 in Copenhagen in 2009, the hope was that a strong new agreement could provide a large amount of REDD+ performance-based finance. Now, international funding for REDD+ primarily comes from development aid budgets, which gives it a different dynamic and has contributed to a broadening of the scope of REDD+ and added multiple objectives.

This changing context, the political and economic battles and the challenges on the ground present dilemmas. REDD+ promised to bring in a new and fresh approach: large scale funding and performance-based support. This was supposed to make REDD+ different from and more successful than past conservation efforts. But the problem, put simply, is this: we don't have enough financing to change the fundamental equation of costs and benefits of forest conversion, and thereby to make everyone winners. Higher global demand for land for food, fibre, fuel and environmental services has enlarged the challenge. Thus, REDD+ needs to deliver on many fronts in villages and cities and capitals. REDD+ needs to establish and strengthen broad coalitions and serve diverse interests in order to secure strong and sustained political support. How should REDD+ be modified to generate that support, without losing focus and pulverising the original idea that made it so attractive in the first place?

1.2 Purpose of this book

1.2.1 Three generations of REDD+ research

Just as REDD+ implementation has three phases (readiness, policy reforms, and result-based action), REDD+ research is also progressing through three generations:

First generation: designing REDD+ and learning from related experiences in the past. The first generation of REDD+ research is concerned with REDD+ architecture at all levels: the institutional set up, how to deal with particular challenges such as leakage, additionality and permanence and the specific policies that could become part of the REDD+ efforts. The key question that these efforts try to answer is: *What should REDD+ look like to be effective, efficient and equitable?*

Second generation: the political economy and implementation of REDD+. The second generation of research analyses the processes of policy formulation and decisions for early implementation of both national policy reforms and local and subnational projects. The key questions being addressed are: *How is REDD+ being decided and implemented, and why?* An important sub-question is: *What hinders or enables decisions about and implementation of effective, efficient and equitable REDD+ policies and projects?*

Third generation: assessing the impact of REDD+. The third generation of research attempts to measure and analyse the impact of REDD+, particularly on forest carbon and local livelihoods. The two basic questions to be answered in this phase are: *Does REDD+ work? How can REDD+ work better?* An important sub-question is: *How should REDD+ outcomes be measured?*

There is a natural sequencing between these generations, as they follow the actual REDD+ implementation. The first two edited REDD+ volumes from CIFOR were first generation research outputs: 'Moving Ahead with REDD: Issues, options and implications' (2008) and 'Realising REDD+: National strategy and policy options' (2009). The current volume, 'Analysing REDD+: Challenges and choices', moves us into second generation research and contains mainly an analysis of *actual* REDD+ design and early implementation. Some first generation research is retained; for example, the chapters in Part 3 ('Measuring REDD+') also address the question of how REDD+ could be designed and implemented. Indeed, moving into second and third generation research does not imply that first generation questions have been fully answered: there are still many lessons to learn, and we need to return to the questions on optimal REDD+ design as we gain lessons from answering second and third generation questions.

A characteristic of second generation research is critical distance. Recognising that there are considerable problems in moving from the idea of REDD+ to its implementation, research requires a greater detachment. There is more latitude for being appropriately and constructively critical if the researchers themselves place more emphasis on their role as evaluators and less on their role as promoters of REDD+.

The third generation research questions cannot yet be answered – at least not at the scale necessary to do them justice. The chapters in this book concerning the local implementation of REDD+ projects include findings that can provide reasons for optimism (e.g. REDD+ projects are located in high deforestation areas, Chapter 12) or pessimism (e.g. REDD+ is largely perceived as a 'win–lose' option, Chapter 11). However, assertions found in the public REDD+ debate about whether REDD+ does – or does not – deliver are either based on general optimism and hope or pessimism and worry. The bottom line is

that we need three to five years of implementation of REDD+ policy reforms and projects before we can start answering the question: Does REDD+ work?

1.2.2 Overview of the book

This book aims to take stock of REDD+ experiences to date at the national level, as well as at the subnational and local levels where projects are implemented. In the process, we ask several questions: What is happening in national policy arenas and on the ground? How has REDD+ changed? What does it really look like? Where is REDD+ heading?

The subtitle of the book – 'Challenges and choices' – indicates our aim to provide a better understanding of the *challenges* involved in designing and implementing effective, efficient and equitable REDD+ policies and projects. We want to provide comparative evidence on how the challenges materialise in different contexts and at different scales, as well as the main obstacles to success. We do not want to stop here, but also intend to suggest ways to break logjams. What *choices* will help us to overcome the obstacles we have identified?

While the book covers a wide range of topics, it does not pretend to provide a complete coverage of all REDD+ issues. There is limited attention paid to issues around global REDD+ architecture, for example, although some chapters touch on this, e.g. finance (Chapter 7), reference levels (Chapters 14 and 16), emission factors (Chapter 15) and safeguards (Chapter 17). Similarly, most of the national level policy analysis focuses on the politics of REDD+, and less on the adequacy of policies, their implementation and their impacts.

Most of the empirical material presented in the book is based on a major research effort by CIFOR and partners called the Global Comparative Study on REDD+ (GCS). The project is described in the Appendix. It has yielded a wealth of information from 5–12 countries (depending on the study concerned), allowing for comparative analysis and robust conclusions. This book is the first synthesis of research results from the project.

A recurring question within the project is: *What is REDD+?* (see also Box 1 in Angelsen 2009). Definitions occur in two important dimensions. First, REDD+ has a *vertical dimension,* where it can refer to the overall idea, the objective of reduced emissions and increased removals, a set of policies or actions to achieve that objective, the outcome resulting from these or the process involving all of the aforementioned elements. Second, it has a *horizontal dimension* related to scope. A broad definition, based on the official definition of UNFCCC from COP13 in Bali in 2007, holds that REDD+ comprises local, subnational, national and global actions whose primary aim is to reduce emissions from deforestation and forest degradation and enhance forest carbon stocks in developing countries. A narrower definition, used in GCS to select target REDD+ projects for research,

specifies that the primary aim is related to greenhouse gas (GHG) emissions and removals, *and* that actions should include result-based or conditional payments.

The authors of this book intend it to serve as a critical analysis of how REDD+ is unfolding in different arenas. While we try to keep our distance, we are also concerned researchers. We are worried about climate change, about the destruction of forests and about the poverty and well being of people living in forest areas in developing countries. We share the overall objective of REDD+ to reduce GHG emissions, but may have diverse views on what the key challenges are and how to realise the goals of REDD+. While the book contains some broad messages, the observant reader will also find divergent views and emphases across the chapters. That's the way it should be.

The chapters are written in an accessible style, but are based on rigorous research. The book should provide information and critical assessments to a variety of stakeholders: REDD+ practitioners and project implementers, policy makers at national and subnational levels, international negotiators, donors, researchers, journalists and any others with an interest in the challenges and choices that come along with trying to implement the grand REDD+ idea.

1.3 Organisation of the book

The book is divided into three parts. **Part 1: Understanding REDD+** sets out the framework for the analysis and provides a context for much of the remainder of the book. **Part 2: Implementing REDD+** provides several topical studies on REDD+ discourse at the national and local levels and considers the political economy of designing and implementing REDD+. **Part 3: Measuring REDD+** tackles the challenge of how to measure results in a result-based REDD+.

1.3.1 Part 1: Understanding REDD+

Many of the chapters in this book analyse the politics of REDD+ using the 4Is framework presented in **Chapter 2**. The 4Is consist of: *institutions* (rules, path-dependency or stickiness), *interests* (potential material advantages), *ideas* (policy discourses, underlying ideologies and beliefs) and *information* (data and knowledge, their construction and use) (Figure 1.1). The chapter uses these concepts to discuss how transformational change can occur and argues that this might happen for three different reasons: REDD+ has the potential to change fundamental economic incentives; REDD+ brings new information and discourses; and REDD+ brings new actors into the arena and may lead to new coalitions for change.

Using this framework, **Chapter 3** tracks key changes in REDD+ since it entered the global stage in 2005. First, it notes that REDD+ has been remarkably

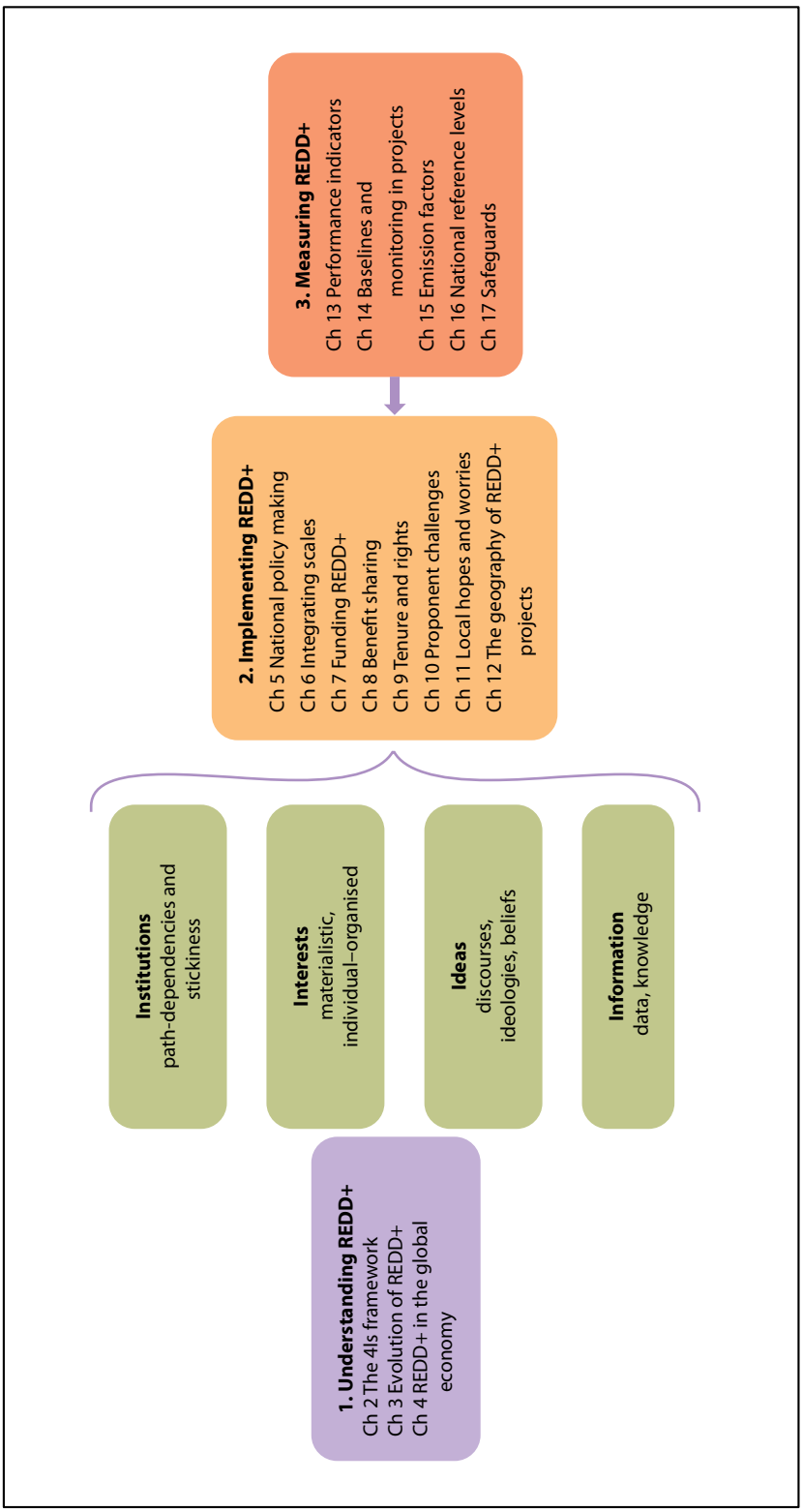

Figure 1.1 Structure of the book

successful as an idea and attributes this success to the idea itself and its promise to serve different actors and interests and bridge the environment and development agendas. The authors argue that REDD+ has changed in major ways: i) moving from single (carbon) to multiple objectives; ii) developing policies and practices that go well beyond result-based payments; iii) paying more attention and providing more resources to the subnational and project (rather than national) levels; and iv) being funded mainly by international aid budgets and through the efforts of REDD+ countries, rather than from carbon markets. Now, the main characteristic of REDD+ that made it different from past efforts in the forestry sector – i.e. large-scale result-based funding – is at risk of being overshadowed by other objectives and approaches, thus endangering its effectiveness.

The global economy represents an important contextual variable for REDD+ development. **Chapter 4** tracks four key trends that have increased pressure on forests and have made REDD+ implementation more challenging: i) the expansion of global demand for food, energy and materials; ii) a growing integration of food, fibre and energy markets; iii) persistent price volatility in global food and agricultural markets; and iv) large-scale land acquisition. The chapter looks at how these forces shape land uses in the Brazilian Amazon, East Africa and Indonesia. The four trends increase the opportunity costs of REDD+, which, given the dim prospects of long term funding raises questions about the feasibility of PES-like schemes being able to make conservation sufficiently attractive to forest owners. The chapter concludes that relevant policies must address both the supply and demand sides in producer and consumer countries.

1.3.2 Part 2: Implementing REDD+

The largest section of the book deals with the experience of implementing REDD+, including the ways in which different facets of REDD+ are being shaped in the policy arena and what happens when REDD+ ideas meet realities on the ground. The first five chapters of this section focus on national level issues and the integration between national and subnational levels, while the last three deal exclusively with REDD+ subnational projects. Most chapters draw on the research done by the GCS.

The national policy arenas in REDD+ countries are a – or perhaps *the* – key arenas for determining the future of REDD+. **Chapter 5** draws on political economy and media analyses in seven REDD+ countries (Bolivia, Brazil, Cameroon, Indonesia, Peru, Nepal and Vietnam). Using the 4Is framework, the authors seek to understand national policy processes and discourses and to identify major constraints to effective REDD+ policies. The chapter argues that four factors are critical for overcoming political-economic hurdles: i) the relative autonomy of a nation state from key interests that drive deforestation

and forest degradation; ii) national ownership over REDD+ policy processes; iii) inclusiveness of REDD+ policy processes; and iv) the presence of coalitions that call for transformational change. Results from country profiles and the media-based discourse analysis indicate that all countries struggle to fulfil these criteria. In addition, formulating and implementing effective national REDD+ strategies is particularly challenging in countries where international actors are the sole force driving REDD+ policy processes.

Achieving reduced forestry emissions is inherently a multilevel puzzle. Local people face global demands for climate change mitigation, which must be met through existing and emerging national and subnational institutions and structures. **Chapter 6** argues that if the interconnections between the national and subnational levels are disregarded, REDD+ could fail. The challenge is to match institutions and incentives across the levels, ensure the flow of information required to implement REDD+ and enable the negotiation of actors with different interests across all levels. The chapter provides anecdotal evidence from three countries (Brazil, Indonesia and Vietnam) on the challenges and opportunities of multilevel governance in two areas: measurement, reporting and verification (MRV) and emissions leakage.

A key element of the multilevel governance challenge is the need to ensure flows of funding to the actors that undertake REDD+ actions and this is addressed in the two chapters that follow. **Chapter 7** looks at the overall issue of REDD+ finance and includes a discussion about and estimates of REDD+ costs. It notes that REDD+ finance faces an inflection point: while short-term finance is available, disbursements are slow and investment opportunities scarce. At the same time, there is no adequate and predictable long-term strategy on how to meet the financial needs of REDD+. In the absence of an international climate agreement and with the slow growth of REDD+ funding from carbon markets, about two thirds of the international finance so far has come from development aid budgets. Public sector finance from international donors and REDD+ country governments is likely to dominate REDD+ financing in the short to medium term.

The distribution of REDD+ funding to different actors is one of its most important design aspects. **Chapter 8** gives an overview of major debates related to the design and implementation of a REDD+ benefit sharing mechanism. Benefit sharing is important for creating positive incentives for actors to reduce carbon emissions, but it also has distributional implications and must be fair in order to build greater legitimacy and support for REDD+. While the effectiveness versus equity debate is a major discourse, there are several nuances within each of them. The chapter also provides a number of examples of planned or recently established benefit sharing mechanisms underway in REDD+ countries and in subnational projects.

Benefit sharing is related to the question of carbon rights, which in most countries is closely associated with land rights and tenure. **Chapter 9** notes that REDD+ can be used as an incentive to support forest tenure reform, while at the same time, tenure reform is a strategy to support REDD+. Tenure reform can become an important part of the transformational change that REDD+ seems both to initiate and depend upon for success. The chapter provides a broad overview of critical tenure issues in six REDD+ countries (Brazil, Cameroon, Indonesia, Peru, Tanzania and Vietnam) and describes progress so far in dealing with them. While REDD+ has brought much attention to tenure, efforts at the national scale to address land and carbon tenure issues have been limited. At the same time, project-level interventions to address tenure encounter substantial obstacles if they do not have national backing.

The following three chapters focus only on local level and subnational REDD+ projects. Chapter 10 looks at projects from the proponents' point of view and Chapter 11 from local villagers' perspectives, while Chapter 12 takes a birds' eye view and focuses on the location of projects.

The original, key idea of REDD+ was to establish a PES system that would make payments from the international level to individual forest users. **Chapter 10** shows, based on surveys of project proponents, that most of the analysed REDD+ projects combine the PES approach with a more conventional integrated conservation and development project (ICDP) approach, emphasising the enforcement of forest regulations and providing alternative sources of livelihoods. This *hybrid approach* is useful, in part because of uncertainties related to the future of REDD+, the funding stream in particular. Under conditions of policy and market uncertainty, this hybrid structure enables proponents to make early progress on project establishment and the ICDP approach can serve as a fallback option if PES fails to materialise. However, this hybrid approach may also undermine what was supposed to be one of the most powerful features of REDD+, with potentially negative effectiveness and equity consequences.

The PES idea promises a win–win menu: local forest users will choose forest conservation if the compensation they receive is higher than potential earnings from alternative forest uses. In practice, REDD+ may, with the hybrid model, be less straightforward and the outcomes uncertain. **Chapter 11** reports on a detailed household survey in GCS project areas on local perceptions, hopes and worries. The results are clear: local people think of REDD+ as being primarily about forest protection, while their main hopes and worries concern income and livelihoods. The study highlights the importance of incorporating local concerns about REDD+ when developing the communication and intervention strategies that are planned or undertaken by project proponents.

REDD+ success hinges not only on local support, but also on interventions being targeted to areas with high levels of deforestation and forest degradation, that is, areas where they can yield real emission reductions (i.e. additionality). **Chapter 12** looks at the location of projects, using various sources of information, including a global database on REDD+ projects developed by GCS. At the international level, the analysis finds that countries with high biodiversity and more protected areas are more likely to have REDD+ projects, which fits with proponents' assertions that they consider biodiversity co-benefits when selecting sites. A detailed study in the two main REDD+ countries – Brazil and Indonesia – suggests that projects are more likely to be established in areas with high deforestation rates and forest carbon densities, a welcome conclusion from a REDD+ perspective and consistent with a focus on additionality.

1.3.3 Part 3: Measuring REDD+

A key feature of REDD+ is that it should be performance- or result-based, which, quite obviously, requires that results will have to be measured. The ultimate outcome is measured in terms of reduced emissions (or increased removals), and this requires essentially three types of information: i) activity information (e.g. area converted from primary forest to crop land); ii) emissions factors (e.g. reduction in carbon per hectare when converted from primary forest to crop land); and iii) the reference emission level, or business as usual baseline (i.e. the emissions without REDD+). These are linked as follows:

*Emissions reduction = (activities * emission factors) – reference emissions*

Three chapters of Part 3 address these elements. Chapter 14 concerns the measurement of activities and baselines at the local level, Chapter 15 addresses emission factors, while Chapter 16 looks at reference levels with a national-level focus.

The lack of reliable data on emissions and removals in many countries implies, however, that a performance-based system using changes in forest carbon, as the criterion will be difficult to implement for some time. **Chapter 13** therefore argues that, in the medium term, most payments will be for readiness and policy reforms, rather than for proven emissions reductions. Hence, good performance indicators are critical for all three REDD+ phases, in particular for Phase 2 where the focus is on policy performance. Unfortunately, there has been little focus on such performance indicators in the REDD+ debate. The chapter argues that valuable lessons on governance indicators can be learned from the aid sector: avoid seeking the perfect indicator and use expert judgment extensively.

Chapter 14 notes that over the past few years, robust standards and methods have been developed for estimating emissions from deforestation at the project level. The chapter presents and discusses one of these standards in particular, namely the verified carbon standard (VCS). It also looks at the adoption of monitoring and baseline standards among project proponents in GCS, observing that most of these projects might face problems in complying with some of the basic VCS requirements. This is mostly due to the methods used to predict future deforestation, the lack of data for constructing historical deforestation rates and the use of non-permanent carbon stock sampling plots. The next generation of projects should learn from this experience by identifying or developing suitable methods *before* investing in the development of their baselines and MRV systems.

Emission factors are needed to convert area estimates of deforestation and forest degradation to emissions and carbon stock changes, both in local REDD+ projects and at the national level. **Chapter 15** notes that emission factors account for as much as 60% of the uncertainty in GHG inventories. Country or region-specific emission factors are lacking for most tropical countries, making it impossible to accurately and precisely estimate emissions from sources and removals by sinks in national REDD+ programmes and REDD+ demonstration activities. Significant investments and coordinated efforts are required as part of readiness financing in order to overcome data limitations and institutional insufficiencies. The constraints can be overcome if coordinated, targeted investments are made and productive partnerships are developed between the technical services in REDD+ host countries, intergovernmental agencies and advanced research institutes in developed countries.

The issue of developing national reference levels and reference emission levels is dealt with in **Chapter 16**. The challenges relate to the lack of quality data in many countries, genuine uncertainties in future rates of deforestation and forest degradation, and potential incentives for biased estimates. The chapter proposes to deal with these challenges through a stepwise approach to developing forest reference levels and reference emission levels, which reflect different country circumstances and capacities. This can facilitate broad participation, early start-up and motivation to improve over time. The uncertainty of any predictions is also noted and options to deal with it are discussed.

Finally, REDD+ is not only assessed on the achieved reductions in emissions, but also on the extent to which it complies with broadly accepted safeguards. **Chapter 17** observes that the early adoption of national and project-level social and environmental standards suggests that REDD+ policy makers, project proponents and investors value REDD+ safeguards. Drawing on GCS

research, the chapter discusses the safeguards, discourse and actions at the international, national and project levels. It notes that the REDD+ safeguards dialogue needs to move from high-level international discussions to actions on the ground. Achieving 'free, prior and informed consent' (FPIC) remains a challenge for a variety of reasons. "FPIC is an impossible dream we are chasing," notes one project proponent.

Chapter 18 summarises the book and looks ahead. Changes in REDD+ over the last five years have led to significant shifts in the likely size and composition of financing, the likely pace and cost of implementation and the divergence of interests across actors and levels. Challenges resulting from these changes include the 'aid-ification' of REDD+, sequencing problems faced by project proponents and less certain rewards for REDD+ efforts by forest countries and communities. In light of the uncertainty related to the magnitude and form of REDD+ finance, the chapter proposes 'no regrets' policy reforms and investments. These include building broad political support for REDD+ by reframing it as an objective rather than a programme, building the foundation for successful REDD+ implementation, and undertaking policy reforms that should be pursued regardless of climate objectives. Such reforms include clarifying tenure, improving governance and removing costly subsidies that promote deforestation and forest degradation.