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# FOREST CARBON RIGHTS GUIDEBOOK

A TOOL FOR FRAMING LEGAL RIGHTS TO CARBON  
BENEFITS GENERATED THROUGH REDD+ PROGRAMMING

MAY 2012

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Report authored by Anna Knox; Darryl Vhugen (Landesa); Soledad Aguilar; Leo Peskett; and Jonathan Miner (Landesa).

PRRGP is implemented by:

Tetra Tech ARD  
159 Bank Street, Suite 300  
Burlington, Vermont 05401  
Tel: (802) 658-3890  
Email: [ard@tetratech.com](mailto:ard@tetratech.com)

Contact Information:

Melissa Hall  
Project Manager  
[Melissa.Hall@tetratech.com](mailto:Melissa.Hall@tetratech.com)

Matt Sommerville  
Senior Technical Advisor/Manager  
[Matt.Sommerville@tetratech.com](mailto:Matt.Sommerville@tetratech.com)

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## **DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.



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# BACKGROUND

Deforestation is a leading source of carbon dioxide emissions, accounting for an estimated 12% to 17% of global greenhouse gas (GHG) emissions, and over 90% of national emissions in many developing countries.<sup>1</sup> Reducing deforestation and enhancing forest carbon stocks is now considered crucial to mitigating the impacts of global climate change and has become a major focus of international climate policy.

Reducing emissions from deforestation and forest degradation, otherwise known as REDD+, is an emergent international mechanism aimed at increasing forest-based carbon sequestration by providing developing countries with financial incentives to protect and better manage their forest carbon stocks. Forest carbon stocks represent a new and poorly defined asset with unclear linkages to the rights associated with the resources that store the carbon and the land on which those resources reside. This makes assigning rights to benefit from increased sequestration and reduced emissions of carbon—or “carbon rights”—complicated and prone to opportunism.

For REDD+ to be successful in incentivizing behavior that leads to reduced net emissions (while also avoiding harm and potentially creating benefits to forest-dependent communities), the right to benefit from sequestered carbon and reduced emissions must be clearly delineated. There is no single “best approach” that can be universally applied to define and allocate carbon rights. The approach that individual countries take will depend on a number of factors—not the least of which is the existing resource tenure situation in the country and the final shape of an international REDD+ system.

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<sup>1</sup> Intergovernmental Panel on Climate Change (IPCC), 2007; Van der Werf, 2009.



# PURPOSE AND STRUCTURE OF THE GUIDEBOOK

This guidebook is designed to enable development practitioners and policy makers to cultivate a deeper appreciation of carbon rights, the challenges associated with them, and their implications for REDD+ programming. Ultimately, the guidebook aims to assist practitioners to identify options for framing carbon rights in law that will yield positive outcomes for the environment and local communities.

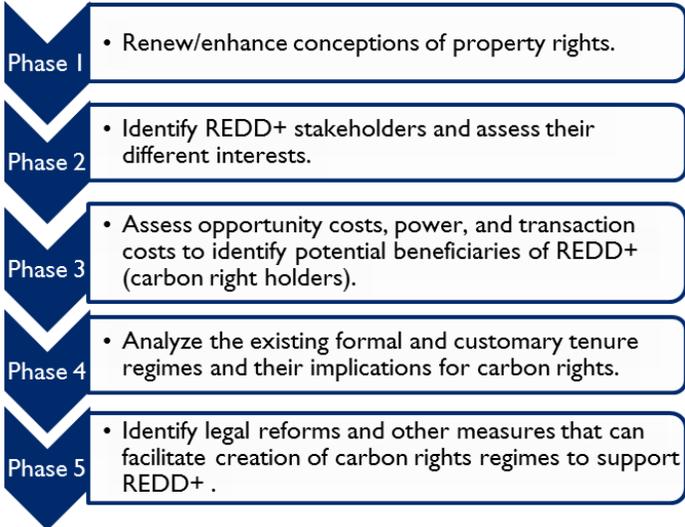
Following a brief introduction to REDD+, the guidebook lays out a process for considering who should be entitled to receive benefits associated with REDD+ activities and the nature of those rights in order to create the appropriate incentives. Perfect solutions are unlikely, and the guidebook elucidates potential trade-offs practitioners are likely to face.

The process begins with gaining a more nuanced understanding of property rights and situating carbon rights within this concept (Phase 1). The guidebook then presents guidelines for assessing the relevant stakeholders in structuring REDD+ programs and their interests (Phase 2), followed by guidance to identify the appropriate beneficiaries—or carbon right holders—in order to cultivate the necessary incentives to meet REDD+ objectives (Phase 3). Here, consideration is given to the level at which compensation is provided and the potential implications of channeling benefits to different scales of beneficiaries.

The guidebook then provides analysis of the tenure situation and guidance on assessing rights to carbon, forest resources, and land within both customary and statutory law, particularly as these relate to the identified beneficiaries (Phase 4). Such analysis is designed to enable practitioners to establish where gaps, weaknesses, and conflicts exist in defining and structuring carbon rights to achieve REDD+ objectives. The guidebook lays out a series of options for framing carbon rights in law that might be appropriate depending on the outcomes of the analysis of REDD+ stakeholders, potential beneficiaries, and the tenure situation (Phase 5). Trade-offs associated with different alternatives for assigning carbon rights are discussed. Measures that might accompany legal reforms are also provided.

Figure 1 outlines the logical progression of the guidebook, framed as a series of analytical steps.

**Figure 1: Elements of the Carbon Rights Guidebook**

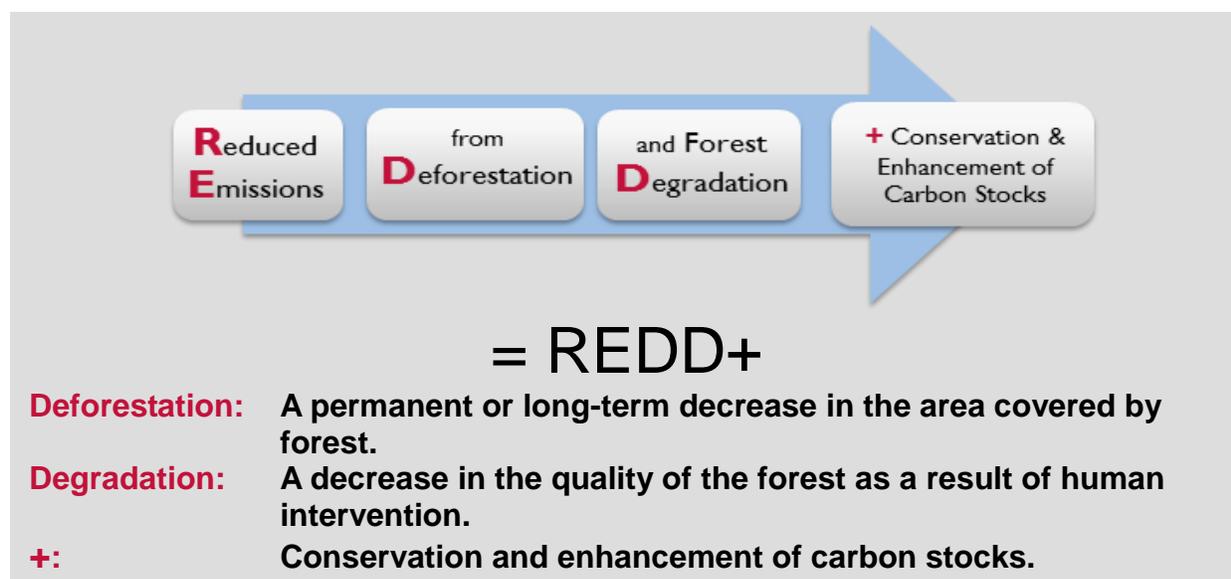




# INTRODUCTION TO REDD+

Reducing emissions from deforestation has long been discussed within the United Nations Framework Convention on Climate Change (UNFCCC). When discussions commenced on a post-2012 regime in 2005, the Coalition for Rainforest Nations introduced the idea of creating a new mechanism to compensate developing countries for reducing their rates of deforestation (originally known as “RED”). Debates have continued since within the UNFCCC framework, first incorporating the reduction of emissions from forest degradation (the second “D” in “REDD”) and finally expanding to consider the role of conservation, sustainable management of forests, and enhancement of carbon stocks (the “+” component of “REDD+”).

**Figure 2. The 2 Ds and the +**



The international community has yet to reach agreement on the rules necessary to implement REDD+, including how the program will be financed in the long term and how funds will be disbursed. REDD+ benefits could be derived from any or all of several sources: international carbon credits generated by a country as a result of net emission reductions; donor funding; other domestic trading mechanisms; or voluntary market credits. However, there is still significant debate over the appropriate mix of market and non-market scenarios, as well as the ultimate scale of future markets for forest carbon credits under international trading systems. Nevertheless, as this guidebook is written, dozens of countries are developing national REDD+ strategies and policies, and hundreds of REDD+ pilot projects have been initiated.

## HOW ARE COUNTRIES PREPARING FOR REDD+?

Many forested developing countries are engaged in a process leading to “REDD-readiness” with technical, financial, and operational support from the World Bank’s Forest Carbon Partnership Facility and/or the UN-REDD Programme. In this process, countries determine and then attempt to fill the gaps between their existing social, technical, and institutional capacities and those that may be required for participation in an eventual REDD system. The process includes consideration of benefit-sharing strategies.



# PHASE I: UNDERSTANDING PROPERTY RIGHTS AND CARBON RIGHTS

In developing an understanding of carbon rights, it can be helpful to take a fresh look at property rights more generally. Property rights to natural resources and their products are often conceived of as the relationship between a person and the resource. However, property rights are more appropriately understood as *relationships between people* with respect to the various economic and non-economic benefits generated by a resource, such that some individuals are entitled to those benefits while others are excluded. It is this *ability to exclude others from benefits* that forms the major justification for property rights and gives them value. Without exclusion, there is no assurance given to those who invest in a resource that they will be the ones to reap the benefits from it.

In order for a benefit claim to qualify as a property right, it must also be supported by some *collective willing to defend that claim* based on an established set of rules. Bromley defines property rights as

**the *capacity to call upon the collective to stand behind one's claim to a benefit stream*** (emphasis in original).<sup>2</sup>

Hence, the collective upholding of one's rights may be the state in the typical case of legal property rights. For customary rights, the collective may be a community, a tribe or clan, a neighborhood, those who subscribe to a particular religion, or any other collective apart from a government that possesses a set of shared rules and norms for assigning and upholding property rights. Without a collective that is willing and capable of defending property rights and that is regarded as legitimate by society, those rights hold little value.

There is *no singular right to a resource*. Property rights are often referred to as rights of “ownership,” “usufruct,” and “leasehold.” Yet, because these terms seek to collapse an unspecified set of rights into a uniform concept, they can be misleading. Rather, there are different combinations and permutations of property rights—rights to derive economic and non-economic benefits from a particular resource, which may be held by different individuals at different times. In one context, a land “owner” may have a right to access that land, reside on that land, grow crops on that land, raise livestock on that land, extract minerals on that land, bequeath the land to her descendants, rent that land, and sell that land—with these rights to benefits afforded to them so long as they “own” the land. In another context, the right to extract minerals or sell the land may be precluded from the “ownership” bundle. In another

In this guidebook, a carbon right is defined as the right **to benefit** from sequestered carbon and/or reduced greenhouse gas emissions, with the analysis of this right confined to carbon sequestered in trees.

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<sup>2</sup> Bromley, 1991, p. 15.

case, the “owner” may be prohibited from making certain improvements or raising livestock, even whilst they possess the full range of transfer rights.

Similarly, there can be myriad property rights to trees—currently the primary source of carbon sequestration considered under REDD+. People may have rights to collect different products from a tree (e.g., fruit, nuts, bark, dead branches, and leaves), rights to alter or improve a tree, rights to hang beehives in a tree, rights to enjoy the shade of a tree, or rights to fell a tree—all of which generate different benefits. Indeed, the rights to the potential benefits derived from different uses of the tree may be expansive or limited (e.g., restricted for subsistence use only). The carbon sequestered by a tree may be understood as one among several other tree “products,”<sup>3</sup> the *economic* benefits of which are subject to exclusive claims by different actors. Despite being an intangible product, it is the benefit from that product that is important in conceiving of the right, rather than the product itself. In this guidebook, a carbon right is defined as the *right to benefit* from an increase in sequestered carbon and/or a reduction in GHG emissions, with the analysis of this right confined to carbon sequestered in trees owing to the current emphasis of REDD+.

Historically, property rights to sequestered carbon did not exist because carbon sequestration did not generate excludable benefits—only non-excludable benefits in the form of a cleaner environment. With the emergence of REDD+ and payments<sup>4</sup> in exchange for reduced emissions and increased sequestration, this reality is rapidly changing. Attaching an excludable economic benefit to sequestered carbon has ushered in a new imperative to define “carbon rights” together with mechanisms to assess who is entitled to them and to effectively channel payments to the right holders.

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<sup>3</sup> Similarly, the process of carbon sequestration may be understood as an environmental service. Whether one conceives of sequestered carbon as a product or a service depends on whether the economic benefit is being provided on the basis of the amount of sequestered carbon produced (an output) or the actual process of carbon sequestration (a service).

<sup>4</sup> In this guidebook, “payments” and “economic benefits” are terms used to capture not only financial rewards for generation of REDD+ benefits, but also non-financial rewards, such as provision of local improvements, infrastructure, and services.

# PHASE 2: STAKEHOLDER ANALYSIS

Undertaking a stakeholder analysis is an essential component of effective REDD+ programming. Identifying the actors involved in shaping the process, those who are affected by the process, and the particular interests of each enabled programmers to understand where incentives are aligned and can support mutually beneficial collaboration, and where opposing interests can potentially fracture success if they are not managed. Stakeholder analysis sheds light on what opportunities exist for structuring REDD+ arrangements to maximize stakeholder gains and minimize losses in order to ensure the long-term success of REDD+ implementation.

Table 1 lists key stakeholders in REDD+ programming and an illustrative set of potential interests associated with each. REDD+ programmers are encouraged to develop matrices that identify the actors and interests unique to their own situations, undertaking research as necessary to fill in gaps and build understanding. This analysis can then be used to identify the potential roles of different stakeholders in structuring, participating in, or otherwise supporting a carbon rights regime and the (dis)incentives they may have in fulfilling those roles. It is also appropriate to identify which options for recognizing and assigning carbon rights are likely to appeal to or encounter resistance from different interests.

**Table 1: Stakeholder Analysis Matrix**

STAKEHOLDERS	ILLUSTRATIVE INTERESTS
<p>Forest-dependent communities and individuals who use forest land and other forest resources, whether for subsistence or commercial purposes. May be forest-dwellers (women, men, youth, older adults, etc.), neighboring communities, or mobile communities who use forest resources on seasonal or other temporary bases. (It is useful to break communities down into different categories of forest resource users and rights holders to examine their unique, and possibly competing, interests.)</p>	<ul style="list-style-type: none"> <li>• Improved livelihood</li> <li>• Welfare of family and community (food security, health, social security, safety, opportunities for better life, self-determination, happiness)</li> <li>• Survival</li> </ul>
<p>Other claimants to forest land and resources, whether claims are supported by statutory law or customary law. For example, private investors, private landholders, individuals with timber harvesting licenses, non-user groups, or authorities with historical claims to forested areas.</p>	<ul style="list-style-type: none"> <li>• Profit</li> <li>• Low risk/stable investment</li> <li>• Recovery of real and opportunity costs of investment</li> <li>• Family welfare</li> <li>• Restitution of historical claims</li> <li>• Compensation for lost territory and/or resources</li> <li>• Territorial dominion/governance</li> </ul>

STAKEHOLDERS	ILLUSTRATIVE INTERESTS
Local and/or national government.	<ul style="list-style-type: none"> <li>• Public good promoted via law-making and provision of services</li> <li>• Retention of decision-making/control/ political power</li> <li>• Public revenues secured</li> <li>• Opportunities expanded for rent-seeking and greater political power (may be confined to certain individuals within government, rather than government as a whole)</li> </ul>
Carbon offset or ecosystem service buyer.	<ul style="list-style-type: none"> <li>• Best value obtained for offset price</li> <li>• Low transaction costs for securing compliance with REDD+ standards</li> <li>• Regulatory obligations met (compliance market)</li> <li>• Reputation benefits secured that lead to increased profits (voluntary market in particular)</li> <li>• Social responsibility</li> </ul>
Inter-governmental bodies, independent foreign governments, and private interests that regulate carbon rights, benefits, and markets.	<ul style="list-style-type: none"> <li>• Regulation compliance</li> <li>• Evidence of reduced emissions/increased sequestration</li> <li>• Financial viability/profit from regulating function (private interests)</li> <li>• Political support from constituents as a result of successful regulation (governments)</li> </ul>
International donor(s) that finance carbon sequestration/emissions reduction.	<ul style="list-style-type: none"> <li>• Meaningful contribution to REDD+</li> <li>• Value for donor investment</li> <li>• Contribution to goals of broader donor mission (e.g., poverty reduction, environmental health, good governance)</li> </ul>
Constituents of foreign governments that demand climate change mitigation and potentially finance it via their taxes to support foreign assistance.	<ul style="list-style-type: none"> <li>• Meaningful REDD+ benefits</li> <li>• Improved global environmental health via reduced GHG</li> <li>• Value for tax dollars invested</li> </ul>

# PHASE 3: IDENTIFYING THE BENEFICIARIES OR PROSPECTIVE CARBON RIGHT HOLDERS

This section is intended to guide policy makers and development practitioners engaging in REDD+ to apply an economic lens in determining the structure of carbon rights, including examination of the political economy. The success of REDD+ will depend on whether the benefits of the program outweigh the costs faced by different parties, which has important implications for how entitlements to those benefits are distributed.

## 3.1 OPPORTUNITY COSTS AND POWER

REDD+ has been envisioned as a mechanism to incentivize those who have capacities to manipulate forest resources in some way either to not interfere with the ability of those resources to generate GHG benefits or to actively manage those resources to generate GHG benefits. As such, REDD+ programming requires one to consider the *opportunity costs* borne by those who hold such interests, i.e., the current and future benefits that different actors forego in changing their behaviors to support REDD+.

A critical question arises as to whether the expected carbon payments earned by those managing natural resources for REDD+—discounted by the risks they face in securing such payments—are sufficient to compensate for the opportunity costs of changing their current and future behaviors to achieve desired levels of REDD+. For example, a carbon buyer may find that in securing an area of tropical forest to offset their carbon emissions, opportunity costs are borne by resident and mobile communities who use forest resources, governments that have rights to award concessions in forests for extractive uses, and even other private investors negotiating with the government to extract resources from the area. Calculations of opportunity costs need to go beyond simple calculations of the value of alternative uses of forest resources to consider whether the structures are there to support those uses (e.g., markets, technologies), the value communities place on standing forests and the environmental services they provide, and the availability and lucrativeness of livelihood opportunities that do not involve the use or degradation of forest resources (or ones that are compatible with REDD+). The costs of avoiding “moral hazard” also need to be figured in; if this is not done, communities who would otherwise exercise good stewardship over their forests may be incentivized to deforest in the hopes of attracting REDD+ support.

To be successful, REDD+ programs will need to ensure that the opportunity cost-bearers are the ones to receive economic benefits and that they are accorded a *right* to receive such benefits.

To be successful, REDD+ programs may need to ensure that the opportunity cost-bearers are the ones to receive economic benefits sufficient to alter (or even maintain) their land use behaviors and that they are accorded a *right* to receive such benefits. In the absence of secure carbon rights, beneficiaries will lack the assurances necessary to forego other uses and to make long-term investments in REDD+. In turn, carbon buyers may be deprived of the security they need to invest in REDD+ programs to offset

their carbon emissions. For example, if payments to beneficiaries can be disputed by competing claimants because rights have not been established or if they can be disrupted by a government with wide latitude to expropriate rights held only under customary claims, then forest-user communities may not have adequate incentives to alter resource-harvesting behaviors.

Beyond considering the opportunity costs faced by those who use forest resources, it is critical also to consider other interests. Inevitably, this includes country governments. Many countries vest “ownership” rights of forests in the government. Although it often is not clear what rights such ownership actually embodies, it can imply a far-reaching ability of the government to acquire forest lands with little or no justification, due process, or compensation. When governments possess wide powers to expropriate land or declare forested land to be “public land” (regardless of customary rights to forest resources), the opportunity costs of government will typically include current or prospective concession revenues and taxes earned on extractive activities. Alternatively, they may embody current or prospective revenues earned from direct harvesting of resources on forest lands.

Private rents and personal profits given to individual government officials in awarding concessions and managing natural resource enterprises should also not be overlooked in considering opportunity costs faced by the government, despite being unsavory. In addition, governments may play an important and legitimate role in measuring, reporting, and verifying emission reductions; structuring REDD+ benefit sharing arrangements; channeling payments; and mediating disputes. The costs of delivering these services will undoubtedly need to be built into the costs of supporting REDD+, and financed either by carbon buyers, other sources of financing, or some combination.

Other interests to consider could include those who may have established claims sanctioned either by formal law or customary law. Examples may be individuals who possess licenses to harvest timber or a paramount chief who governs the forested area and collects tributes from forest users. Identification of prospective beneficiaries and calculations of their opportunity costs also need to factor in power. More powerful actors, such as governments, will often have the capacity to assert their rights over the rights of others and position themselves to capture an unduly large share of the benefits (e.g., by disregarding customary rights to natural resources, displacing resource users, or monopolizing carbon benefits and using force to achieve behavior changes among forest users). Wealthy or otherwise influential private interests may likewise support measures that assign them rights to carbon, even if this interferes with the rights of existing resource users. The structure of carbon rights may be an important tool in mitigating these tendencies.

## 3.2 TRANSACTION COSTS

Beyond opportunity costs, the transaction costs of incentivizing beneficiaries will impact the viability of REDD+ programming. Multiple beneficiaries may face opportunity costs, translating to higher transaction costs unless payment structures can be streamlined and efficient. Monitoring REDD+ performance on small plots and issuing payments to multiple individual forest users is likely to yield prohibitive transaction costs for the typical carbon buyer or intermediary institution responsible for payment

Monitoring REDD+ performance on small plots and issuing payments to multiple individual forest users is likely to yield prohibitive transaction costs for the typical carbon buyer or intermediary institution responsible for payment distribution.

distribution. It may also be highly inconsistent with the local tenure system.

In many developing countries, rights to forest lands and resources are held and managed in common by groups of people ranging from small communities to large tribes. Often resources are exploited by multiple users for different purposes, secured by a complex system of overlapping and differentiated rights. In other cases, individual families have primary rights to certain areas or resources of the forest, but other community members may have secondary or conditional use rights over the same resources, while the community itself—represented by their authorities—possesses governance rights over that forest that involve establishing and upholding tenure and use rules and resolving disputes. Where a precedent of community rights exists, vesting carbon rights in communities (rather than in individuals or families) may be appropriate while also serving to diminish the transaction costs of compensating carbon right holders.

However, providing compensation to an entire community could be fraught with incentive problems. Community authorities in charge of administering and allocating funds to community members may be tempted to accrue more than their fair share of the benefits, diminishing community members' incentives to support REDD+. Opportunity costs of individuals and families are not likely to be uniform. If payments are insufficient to compensate for the opportunity costs faced by some community members, they may fail to take up new behaviors to support REDD+, ultimately undermining REDD+ performance and incentives for all community members.

Opportunity costs faced by women and other marginalized members of the community risk being overlooked or undervalued, and they may be excluded from benefits and as carbon right holders. Mobile communities holding secondary forest resource rights likewise risk being marginalized and left with little incentive to alter their resource use behaviors. Resentful neighboring communities excluded from REDD+ benefits could deliberately undermine performance in the programming zone, or they may seek to deforest on their own land in an effort to attract programs to their areas. All these interests merit consideration to avoid unintended consequences and ensure REDD+ success on multiple fronts. Moreover, the introduction of social and environmental safeguards into standards for REDD+ implementation has broadened the objectives of REDD+ beyond climate change mitigation. Principles of equity and respect for human rights are increasingly making their way to the forefront of international REDD+ negotiations, such that programs are likely to face increased scrutiny of their ability to meet these criteria in addition to REDD+ targets.

In identifying who should be entitled to REDD+ benefits, important questions to consider are:

1. Who bears the opportunity cost of changing their behavior to support REDD+? Consider not only those who currently harvest forest resources, but also those who have rights they can exercise over forest resources (e.g., government rights to expropriate or award concessions).
2. What incentives are necessary and appropriate to compensate forest resource users and right holders to change—or even maintain—their behaviors to support REDD+?
3. Are incentives also needed to encourage communities who already manage forests in ways that generate substantial carbon sequestration to prevent them from damaging their forests in order to qualify for REDD+? Should the benefits be the same or less than the benefits received by those who are being compensated to change their behavior?
4. Do all those bearing opportunity costs have rights to economically benefit from REDD+, i.e., carbon rights? Are such rights sufficiently secure to engender the necessary incentives to support REDD+?
5. What are the power relations between the different potential beneficiaries? How does this affect the level of compensation so as to prevent more powerful actors from undermining claims of those with less power?
6. What are the transaction cost implications of compensating all those who bear opportunity costs—and potentially those whose current good stewardship needs to be supported? What options are available to

lower those costs, and what are the potential tradeoffs in terms of eliciting REDD+ incentives and promoting equity?

# PHASE 4: ANALYZING THE EXISTING TENURE SITUATION

It is not enough to assign carbon rights based purely on calculations of opportunity and transaction costs. A country's laws may already explicitly or implicitly state who is entitled to economically benefit from REDD+ and how those rights may be acquired. In countries with robust traditions of customary tenure, these systems may also yield important implications for carbon rights allocation.

Beyond carbon rights, it is vital to consider how other rights to benefit from land, trees, and other forest resources will affect REDD+ performance, and what this implies for how carbon rights should be assigned if REDD+ programs are to be successful. The configuration of those rights (e.g., whether they are held by individuals or groups and the degree to which they are overlapping or nested) will also yield implications for appropriately structuring carbon rights and payments.

## 4.1 REVIEW OF FORMAL LAW

Examining a country's legal framework is essential for understanding who is eligible to claim or acquire rights to carbon benefits, and whether those rights are structured to respond to opportunity costs faced by different actors in supporting REDD+, as well as the corresponding transaction costs of incentivizing those actors. For example, carbon rights may be assigned to or eligible to be acquired by national or local governments, those who occupy or use land or forest resources based on custom or historical claim, those who obtain documentary evidence of their land/resource rights or enter into an agreement with the government (e.g., REDD+ project developers, concessionaires, registered user groups), or those who purchase, inherit, or are given a carbon right. One's carbon right may be inextricably tied to one's rights to trees or the land on which trees reside, or capable of being independent of those rights.

There are essentially two ways that carbon rights can be framed in a country's legal framework: a) they are *explicitly addressed* in the law; or b) they are *implied* through how rights to benefit from land, trees, or other forest resources are framed.

Only the Australian states and the Canadian province of Alberta have thus far adopted laws explicitly mentioning carbon rights.

In the case of Southern Australia, carbon rights are described as

a right (exclusive of the right of the owner of the land) to the commercial exploitation of the carbon absorption capacity of the relevant forest vegetation.<sup>5</sup>

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<sup>5</sup> Forest Property Act, 2000.

Such rights are assigned to the “forest property owner”—distinct from the landowner—and are acquired via entrance into a forest property agreement between the landowner and the forest property owner.

The Carbon Rights Act (2003) of Western Australia does not define carbon rights beyond an “interest in land.” Such rights may be acquired through registration of a carbon covenant and act as a heritable encumbrance on the associated land. Like South Australia, Western Australia provides for carbon rights to be separable from other rights and interests in land.

There are essentially two ways that carbon rights can be framed in a country’s legal framework:

- a) they are **explicitly addressed**;  
or
- b) rights to carbon benefits are **implied** through how rights to benefit from trees and/or land are framed.

Although REDD+ may urge more countries to explicitly frame carbon rights in their laws, thus far most countries have not adopted this approach. Nevertheless, establishing an entitlement to benefit from forest carbon can be derived from legal rights to *benefit* from land, trees, or other forest resources, provided that the framing of these rights does not preclude entitlement to an economic benefit from REDD+. Mexico’s laws are an example of this **implicit** approach. In its Sustainable Forest Development Law of 2003, Article 5 assigns rights to forest resources to the owners of land on which those resources reside. The same law defines carbon sequestration as an environmental service (Article 7, No. XXXVII) and commits the Executive to creating an “economic mechanism to compensate, support, or stimulate forest resource owners and users for the generation of environmental goods and services” (Article 30, No. VII). In essence, the law assigns carbon rights to land and forest resource owners who are one in the same.

An even simpler implicit approach would be to generically assign *rights to benefit* from forest resources—or even just non-timber forest products<sup>6</sup>—to individuals, groups, or communities based on particular criteria for acquiring and demonstrating evidence of those rights. However, if rights to benefit from forest resources preclude commercial benefits in the absence of a concession agreement or a license—the case in Mozambique and Angola—then this can act to prevent forest-dependent communities from securing carbon rights since the right to benefit is most commonly in the form of a payment. Also, if the criteria for acquiring rights to forest land entails having to clear or otherwise “develop” that land, this may *de facto* seal off opportunities for individuals and communities to acquire rights to manage that land for REDD+ and derive carbon benefits.

Review of the legal framework should identify any contradictions in the law in terms of who is eligible to secure rights to carbon, as well as rights to forest land and resources where these form the basis for carbon rights. In Nepal, the Forest Regulations of 1994 suggest that Community Forest User Groups would be the primary beneficiaries of REDD+ by virtue of their ample decision-making power over forest resources in their areas. Yet, in granting the right to sell and generate income from forest resources to Village Development Committees (VDCs), the Local Self Government Act of 1998 indicates that VDCs would hold the carbon rights.

In cases where carbon rights are not defined explicitly, who ultimately is entitled to carbon rights will substantially depend on how law is interpreted. Unless there are unequivocal implicit provisions, forest resource users could potentially be vulnerable to manipulation by more powerful interests seeking legal interpretations in their favor. Such a situation could arise in Tanzania, for example, where rights to unoccupied or unused land (potentially ideal for supporting REDD+) is subject to contradictory legal provisions: one that assigns rights to village governments and another that vests them in the central government. Of even greater concern are the majority of cases where formal law provides no guidance on the assignment of carbon rights and where forest user communities are afforded little or no protections when it comes to rights to the benefits generated by forest resources.

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<sup>6</sup> Provided that forest resources and non-timber forest products are not strictly defined as products that are harvested or removed from the forest.

### 4.1.1 Rights of the State vis-à-vis the Rights of Resource Users

In many developing countries, forest resources are deemed to be the property of the state. Even while the specific rights accorded to the government are often not articulated in law, this has had the effect of affording governments wide latitude to assert rights and deny others rights, particularly when new economic opportunities surface. This is especially common where the rights of forest user communities are afforded minimal or no legal protections. In Indonesia, for example, only weak protections are given to customary land rights while the 1967 Basic Forestry Law declares virtually all forests to be property of the state. This has given the Indonesian government wide discretion over communities' entitlements to carbon benefits or has simply allowed the government to allocate forestland to private commercial concessions with little or no community involvement. As opportunities to benefit from REDD+ expand and potentially become more lucrative, governments may become tempted to exploit provisions of land or forests "belonging" to the state and vagueness in what rights this affords them in order to claim rights to carbon benefits.

Whereas powers of eminent domain may be crucial to fulfill government's role in protecting the "public interest," if that term is defined very broadly or not at all, forest resource users' rights to carbon benefits will be in jeopardy.

Even where carbon rights are explicitly or implicitly afforded to forest resource users, most countries vest certain rights to land and forest resources in the state. Most notable is the right to expropriate land when it is deemed to be in the public interest. Whereas powers of eminent domain may be crucial to fulfill government's role in protecting the "public interest," if that term is defined very broadly or not at all, forest resource users' rights to benefit from REDD+ will be in jeopardy. This could then be exacerbated where governments have extensively exercised their right to appropriate, sometimes even contravening their own legal protections governing land acquisitions.

Rights to subsurface resources are likewise important to consider. A substantial portion of the carbon stored in forests resides in the soil. In some cases, such as mangrove forests, the majority of carbon captured by forests is stored in soil. Country governments may have exclusive rights to minerals, hydrocarbons, and water running beneath the surface of the land. If laws are framed to be explicit about the subsurface resources to which governments are entitled, such laws should not preclude those with land rights from also claiming rights to benefits earned from soil carbon sequestration. However, if the law grants the state rights to subsurface resources more generally, this may limit the ability of those with forest land and resource rights to assert rights to some or all of the associated soil carbon. Regardless of the actual rights to benefit from soil carbon, a state's rights to exploit (or to grant others rights to exploit) subsurface resources may substantially interfere with the tenure security of carbon right holders and their ability to assure REDD+ benefits to funders and carbon buyers over the long term.

Without the assurance of securing carbon benefits over the long term, forest resource users will be drawn to uses that generate a high, immediate return (e.g., timber harvesting). Even if the discounted value of carbon benefits is higher than the timber value, risk and tenure insecurity will cause the former to depreciate. Moreover, if forest resource users are deprived of secure rights to the resources that generate carbon stocks and the land underneath, they may lack the means necessary to exclude others from harvesting or degrading those resources to the detriment of REDD+.

In assessing whether carbon right holders have the necessary tenure security—and therefore incentives—to manage forest resources for REDD+, policy makers and development practitioners will want to examine laws governing the rights of the state to land and forest resources, including the rights of expropriation. As important as the law is actual practice. A government that makes limited use of wide powers of expropriation can offer greater tenure security than one that has stringent laws but flaunts the rule of law.

### 4.1.2 Rights of Women and Vulnerable Groups

Formal laws in many developing countries have adopted Western traditions of assigning “ownership” to land, even while the reality may reflect different right holders over the same resource. The effect has often been to augment the rights and decision-making power of certain individuals’ bundles of rights over those of others. Formalization of land rights has often resulted in men’s rights eclipsing those of women and the rights of cultivators superseding the rights of livestock herders or hunter-gatherers.

Review of formal law should examine the potential for women and other vulnerable groups to be excluded from acquiring carbon rights and the implied consequences of such exclusion.

Although it makes sense to assign carbon rights to those who hold rights to the forest resources that give rise to GHG benefits, laws that assign carbon rights exclusively to the “owners” of land or forest resources may fail to account for the opportunity costs assumed by other right holders who are critical to sustain REDD+. Moreover, such measures risk introducing detrimental equity impacts by excluding from carbon benefits those who are most impoverished or least powerful. Even in circumstances where groups or communities are assigned rights, if such groups act to exclude certain forest resource users from receiving payments or from making decision on how carbon benefits should be invested or used, environmental and equity outcomes may be compromised.

Review of formal law should therefore examine the potential for women and other vulnerable groups to be excluded from acquiring carbon rights and the implied consequences of such exclusion.

### 4.1.3 Separability of Rights

Whether a country’s legislative framework allows carbon rights to be held separately from rights to land with carbon sink resources or from rights to carbon sinks themselves is critical to assess, as it may have significant implications for REDD+ outcomes and the distribution of carbon rights and benefits.

Once carbon rights are separated from other tree and land rights and vested in different individuals, it could become difficult to align incentives and coordinate behaviors to achieve reduced emissions.

If rights to benefit from REDD+ are permanently attached to these resources, compensating for opportunity costs will be much more straightforward because a single individual or group makes a choice whether or not to give up or adapt its other uses of those resources in exchange for the carbon benefits. Once the rights are separated and vested in different individuals, however, it becomes much more difficult to align incentives and coordinate behaviors in favor of REDD+. Those who hold carbon rights will need to find ways to compensate those who hold rights to uses that could interfere with emission reductions outcomes—the most obvious being those who hold rights to harvest trees. Countries like Brazil and Liberia that permit separation of land and forest tenure could present additional challenges if carbon tenure becomes an additional, decoupled layer. In complex customary tenure situations, a carbon right holder may find itself in a position of having to compensate multiple right holders to alter their behaviors—for example, those who have rights to clear the land for agriculture, those who have rights to collect leaves and firewood from trees, those who hold seasonal rights to traverse a forest and collect NTFPs, and those who have rights to remove branches from trees for construction. High transaction costs may make separating carbon rights from other resource rights untenable.

Being able to trade separable carbon rights could add to these transaction cost by virtue of the need for a registration system to record and validate such rights. The most obvious way of securing a separable and transferable carbon right is via an encumbrance recorded on a land title that “runs with the land,” i.e., the obligation to manage the land for REDD+ is passed on to new land holders if the land is transferred. The carbon right holder would then be free to transfer their right independent of who owns the land or the trees or other forest resources that house the carbon. To make this effective will not only require countries to have administrative systems in place to record land and carbon rights, but also enforcement and dispute resolution

systems capable of making right holders accountable for their obligations. This may be beyond the capacity of most countries with large stocks of tropical forest, many of whom have fledgling land administration systems that are accessible to all but a few landholders.

Separate carbon rights also have the potential to deprive land and resource rights holders of the market value of benefits attached to carbon rights. This can happen first if the preliminary right to carbon benefits is not vested in the land/resource right holder(s). Even if resource right holders have the initial right to hold and sell the carbon rights attached to their resources, forest-dependent communities may well lack access to information on the market value of their rights and instead be at the mercy of market-savvy investors and government officials able to take advantage of this ignorance.

If the sale of carbon rights is in the form of a one-time payment, resource rights holders will have little incentive to alter their future use of the resource unless a robust enforcement system exists to supervise behaviors and mete out stiff penalties for violations. Securing the necessary incentives to support REDD+ will entail performance-based payments that can adjust to changing opportunity costs associated with other uses of the resources. How this can be married to separable, transferable rights remains unclear.

In examining whether to support separable, transferable carbon rights, practitioners and policymakers will want to assess the costs carbon right holders will have to bear to create the proper incentive structures and the adequacy of systems necessary to provide right holders with assurance of the anticipated REDD+ outcomes and therefore economic benefits. It will likewise be important to examine the implications of such systems for fostering equity and securing long-term incentives to alter or sustain resource use behaviors in furtherance of REDD+.

#### 4.1.4 Rights under Contract

Even if a country's legal framework does not clarify rights to carbon, it is possible to secure those rights via contracts. A government may grant a concession of public land to an investor to manage a forested area for REDD+ activities in exchange for a fixed rent or share of the benefits from selling carbon credits. An international nongovernmental organization may contract with a registered community to alter their resource harvesting behaviors under a payment for environmental services agreement designed to generate increased carbon sequestration. Provided that the law does not establish carbon rights that contradict contract provisions, assigning rights under contract should enjoy the full force of law.

#### KEY ISSUES TO BE CONSIDERED WHEN INTERPRETING LEGISLATION TO IDENTIFY FOREST CARBON RIGHT HOLDERS

- **Who is eligible to acquire forest carbon rights?** Is it: (i) government; (ii) communities, individuals, and/or private entities managing, using, and/or living in the forests; and/or (iii) third parties (e.g., donors and project developers) participating in a REDD+ project? Does the law make these rights explicit or implicit via rights to benefit from land, trees, or forests— or is the law silent on carbon rights? Are laws conflicting or vague in this respect?
- **Are carbon rights assigned to “owners” or also other land and resource right holders?** What are the implications for women and other vulnerable groups?
- **What are the rights of the state when it comes to land, trees, and forests?** How do these rights potentially impact the tenure security of carbon right holders?
- **Are carbon rights separable from land and tree rights?** Are they tradable? Can the country's system support separable and tradable carbon rights? What are the implications for costs, fairness, and equity?
- **Can carbon rights be secured via contract?** For example, can carbon rights be secured through concessions issued by governments or agreements between private parties? Are there effective measures in place to protect the interests of the less powerful?

Unlike laws governing a constituency, however, contracts do not have the objective of contributing to a more equal and just society. As such, they risk favoring the interests of more resourced and informed parties, potentially at the expense of local communities. Contracts are also temporary in nature and are unlikely to secure the long-term carbon rights of resource user communities. A more equitable, level playing field can be achieved through legal reforms that explicitly protect local communities’ rights to benefit from REDD+.

While potentially appropriate for carbon-based payment for environmental service projects, contracts between carbon buyers and local carbon sellers would be ill-suited to an international carbon credit system that would pay countries based on their net emissions reductions. Hence, allocation of carbon rights via contract may only work for countries where carbon is sold outside of a national REDD+ system.

## 4.2 EXAMINATION OF CUSTOMARY LAW

Although economic opportunities arising from REDD+ are too new for most customary tenure systems to have articulated rules for carbon rights, how these systems have adapted to past resource-based economic opportunities may offer insights for assignment of carbon rights.

In many countries, rural communities—including forest-dependent communities—rely much more on customary law derived from local communities to govern their rights to resources and resource use behaviors than on formal law emanating from the state. Customary tenure systems typically trace their origins to before the formation of the nation-state. They owe some of their resilience to their capacity to: uphold local norms and values; adapt readily to changes in the economic, social, and physical environment; and garner strong social legitimacy by virtue of their kinship base and norms of

reciprocity. Often too, the primacy of customary law in certain contexts reflects lack of capacity by the state to effectively enforce formal law.

Although economic opportunities arising from REDD+ are too new for most customary tenure systems to have articulated rules for carbon rights, how these systems have adapted to new resource-based economic opportunities that have arisen in the past may offer insights for assignment of carbon rights. Many customary tenure regimes uphold a nested system of rights. Territory may “belong” to a particular kinship-based group, whose authorities are given the mandate to govern that territory, much the same way as country governments have a mandate to govern a country on behalf of its citizens. Individuals, families, and groups then have rights within this territory, some permanent and some temporal and often overlapping, such that all rights to a resource are not vested in a single individual or family. Understanding how different resources are used and transferred and splitting rights into decision-making and use categories can help in unraveling the intricacy of customary tenure systems (see example in Table 2).

**Table 2: Rights to a Tree**

USE	DECISION-MAKING
Right to fell	Right to assign use rights
Right to strip bark	Right to suspend or revoke assigned rights
Right to construct and harvest bee hives	Right to transfer some or all rights to someone else
Right to remove sticks for construction	Right to make and/or alter rights and rules
Right to collect dead branches for firewood	Right to set limits on amounts harvested, times one can harvest, techniques or technologies used, purpose of use, etc.
Right to harvest leaves/fruit	

The tenure system and the values it upholds may sway those adhering to these systems toward assigning carbon rights to an entire community, all right holders to the carbon sink or the land on which carbon sinks are housed, or only to right holders with certain decision-making rights to the carbon sink or land. It may even assign rights to those whose livelihoods are most affected by having to change their resource use behaviors, consistent with an opportunity cost approach. It is important to examine the extent of legitimacy accorded by forest-dependent communities to different options for assigning rights to benefit from REDD+.

What is considered proper and just under one customary tenure system may contrast with another in the same country and be altogether different from what a nation's legal framework suggests. The expectation is that those options considered most legitimate will be afforded better compliance.

At the same time, one needs to balance social legitimacy with social justice. Systematic exclusion of certain groups from carbon rights—particularly those who depend on forest resources to meet their basic livelihood needs and face opportunity costs in adapting their land use behaviors—are unacceptable on equity grounds and fail to breed the right incentives to support REDD+.

### **4.3 INSTITUTIONAL INFRASTRUCTURE TO SUPPORT CARBON RIGHTS**

Along with assessing the legal framework for carbon rights, policy makers and practitioners will want to examine whether the institutional environment is capable of supporting effective implementation of existing law and potential reforms. Otherwise, reforms can result in limited impact or even be detrimental to those the reforms are designed to benefit. Depending on the complexity and demands implied by the legal framework supporting carbon rights, substantial investments may be needed to shape or reshape the institutional environment. Institutional reforms often involve creating new roles and structures for large government agencies, building capacity in new regulations and procedures, and taking measures to apprise the public of new opportunities, rights, and responsibilities. Thus, reforms often take several years to complete. Planners and policymakers will want to weigh the institutional investments of reforms involving the creation of new rights as compared to granting legal recognition to existing rights over land and forest resources and linking carbon rights to those. In most cases, the latter options will be more practical, less administratively burdensome, and substantially less costly.

Understanding the potential need for institutional reform requires an assessment of awareness of rights, the capacity of institutions to administer rights, capacity to enforce rights, and the capacity of local governance institutions to participate in a forest carbon mechanism. This assessment should thus focus on the capacity of national, regional and local institutions, local actors, and the relationships among these stakeholders. At present, the rights associated with carbon benefits are ill-defined in many cases, and the institutions, if they exist, are relatively untested. Such an assessment will identify priority gaps in the enabling environment that could benefit from targeted assistance. By evaluating the local awareness of rights, implementers can identify interventions that will empower local actors to participate in forest carbon activities. Through an assessment of rights administration structures, implementers can help government actors structure systems that work for carbon benefits and are consistent with the documentation of other property rights. Finally the strength of rights enforcement systems and local governance structures will be crucial for providing the security that benefits are realized at the local level and that they are distributed to the appropriate stakeholders.

- **Rights Awareness**

- Are forest-dependent communities aware of what legal rights they do and do not have to carbon benefits and others derived from natural resources and land?
- Are these communities cognizant of the channels available to acquire such rights or to defend those rights if they are challenged?
- Are these processes and facilities accessible to those who are poor, live in remote areas, and/or lack higher levels of education?
- Are there mechanisms in place to facilitate awareness-raising and access, especially in the advent of reforms to carbon rights and national adoption of REDD+?

- **Rights Administration**

- What state institutions are in place to administer property rights? How well do these function? Are they mostly centralized or decentralized?
- How widespread is documentation of property rights? Do most landholders possess such documentation? If not, what are the reasons?
- How will carbon rights be handled if rights to forest land and resources are transferable?
- Are administration systems set up to record encumbrances on land rights in the interest of ensuring that new right holders continue to manage forests for GHG benefits? If so, how effective is enforcement of encumbrances?
- Would property rights administration systems be prepared to manage rights to carbon benefits that are separate from land rights and register transactions of carbon rights? What support might they require to be adequately equipped?
- If transferrable carbon rights are not managed through the property rights systems, will they be managed via contracts? What does this imply for the permanence of emissions reductions, the transaction costs of administering REDD+ programs, and opportunities to provide local communities with more secure tenure?
- What extent of capacity building would be required to enable communities to meaningfully participate and benefit from a system of separate, transferrable carbon rights?
- **Rights Enforcement**
  - Which state institutions are responsible for enforcing and resolving disputes over property rights?
  - Are these institutions equipped to handle disputes that would arise over carbon rights, especially between forest resource users and third parties (including government)?
  - Are these institutions accessible to most forest-dependent communities and trusted by them to render unbiased decisions?
- **Community-based Governance**
  - How robust are community-based governance systems? How effective are they in managing local tenure systems and resolving local disputes?
  - Are local governance systems equipped to manage distribution of carbon payments? Are they considered to be fair and transparent by community members?

# PHASE 5: IDENTIFYING OPTIONS FOR REFORMING CARBON RIGHTS IN ORDER TO SUPPORT REDD+

The opportunities and limitations for assigning carbon rights expressed in customary and statutory law assessed in Phase 4 need to be compared with the best options for eliciting individual behavior change incentives and for minimizing transaction costs. In all likelihood, the options will be disparate and involve trade-offs between multiple objectives—maximizing emission reductions, ensuring social legitimacy, promoting equity and fairness, assuaging powerful interests, and guaranteeing efficiency and cost-effectiveness. Table 3 provides an *illustrative* comparison of different options for assigning carbon rights and associated trade-offs. Its purpose is to illustrate an analytical tool. The table should not be used to draw conclusions about the strengths or weaknesses of different options as situations will vary between countries and even within countries, making scoring of the different attributes unique. Policy makers and development practitioners should also structure their analysis based on what alternatives present themselves in the contexts in which they are operating, remembering that a single country may wish to pursue different alternatives in different areas to respond to the realities at hand.

**Table 3: Illustrative Analytical Tool for Evaluating Different Options for Assigning Carbon Rights**

RIGHTS HOLDER	POTENTIAL OBJECTIVES IN ASSIGNING CARBON RIGHTS				
	MAXIMIZE GHG OBJECTIVES	ASSURE SOCIAL LEGITIMACY	PROMOTE EQUITY & FAIRNESS	MODERATE POWERFUL INTERESTS	MINIMIZE TRANSACTION COSTS
<b>Government alone</b>	– Especially if governments lack enforcement capacity.	– Unless carbon rights attributed only to resources on land considered to be legitimately government property.	– Especially if involves displacing forest-dependent communities.	+++ Top down approach may be successful if government is benevolent.	+++ Involves a single performance-based payment.
<b>Government, which shares payments with local communities based on performance</b>	+ May be higher if transparent, fair, and efficient systems in place that primarily compensate actual resource users.	+ If administered fairly and transparently can create social legitimacy.	++ If rights are established through an open process may result in fair and equitable outcomes.	++ Top down approach may be successful if government is benevolent, and has control over local distribution.	++ Involves a single performance-based payment, and relies on government system to share benefits.
<b>Government, which devolves rights to project developers via concessions</b>	++ If rights of forest-dependent communities are stripped, may undermine REDD+.	– Is likely to lack the transparency required to assure legitimacy.	– If communities are excluded from benefit-sharing or only marginally included by project developers.	++ Top down approach may be successful if government is benevolent.	++ Involves a single performance-based payment, and relies on government system to share benefits.
<b>Communities as a group, with payments made to customary authorities based on performance</b>	+ May be higher if transparent, fair, and efficient systems in place that primarily compensate actual resource users.	++ May not be socially legitimate to larger community, depending on trustworthiness of community authorities.	++ Depends on integrity of customary authorities and accountability to their constituency.	+ May be susceptible to elite capture.	+ Involves multiple payments.
<b>“Owners” (primary right holders) of forest land based on performance</b>	++ If owners have enforcement capacity and are adequately compensated.	++ May not be socially legitimate to other users or customary authorities.	++ This is based on those who have existing rights, and is likely to be perceived as fair and equitable.	– Primary rights holders often represent existing powerful interests.	– Potentially prohibitive if many different right holders.
<b>All forest users, based on estimated opportunity costs of changing resource harvesting behaviors and performance</b>	+++ If monitoring is strong enough and directly tied to performance.	++ May not be socially legitimate to “owners” (primary right holders) or customary authorities.	+++ May be perceived as fair by all except primary rights holders.	– – May be susceptible to elite capture.	– – Potentially prohibitive, especially in situations of overlapping rights. May outpace buyer/donor willingness to pay.

**Note:** Scoring ranges from “+++” indicating a very strong likelihood of meeting the objective to “– –” indicating that the option is very unlikely to contribute to the objective.

Creating a legal framework for carbon rights that incentivizes REDD+ outcomes, results in a fair distribution of carbon benefits, and contributes positively to the livelihoods of forest-dependent communities involves a number of other reform considerations. Listed below is an illustrative set of interventions that may be appropriate in meeting these objectives, but is intended mostly to help readers ponder measures that respond to their particular situations. This is followed by several non-legal measures that may be important in effectively supporting a reformed carbon rights legal regime.

## Legal Reform Measures

- Undertake reforms to explicitly or implicitly assign primary carbon rights to those whose land use behaviors are likely to have the greatest bearing on REDD+ outcomes. In many cases, this will be communities who use and depend on forest resources to sustain their livelihoods, but it could also be private landholders engaged in commercial agriculture or other industry. It may also include communities who already manage their resources in a way that contributes to REDD+, but who require incentives to continue such behaviors. In countries where customary rights to land and natural resources are mostly unrecognized by the state, explicit approaches should take care to assign carbon rights to those who have traditionally used and derived benefits from forest resources, rather than assign new rights. Whereas explicit approaches will specifically assign carbon rights, implicit approaches may help forest-dependent communities legally secure a more comprehensive set of rights to the resources they depend on by assigning them a general “right to benefit.” This approach is especially advantageous if rights beyond carbon have thus far not been explicitly articulated in law. In doing so, it will be important that communities are not precluded from rights to commercially benefit from forest resources, either outright or by licensing requirements.
- Consider assigning secondary carbon rights to other interests that have the capacity to affect land use and REDD+ outcomes, e.g., central and/or local governments, especially when governments assume responsibility for allocation of carbon benefits, monitoring, and enforcement, and where it may be important to assuage inclinations by governments to grab or exercise excessive control over resources. It may likewise be important to incorporate communities neighboring forest-dependent communities in order to deter them from undermining REDD+ efforts and to assign carbon benefits to other legitimate holders of land and resource rights besides local communities.
- Remove legal requirements to clear or develop land in order to claim rights to it—or ensure that managing land for REDD+ qualifies as “development” or “improvement,” even if this requires no specific action on the claimant’s part.
- Provide opportunities for different beneficiary units to acquire carbon rights. Consider what customary notions of property rights establish as socially legitimate and the costs of rights acquisition (noting that it may be less costly if rights are acquired as a community or group, rather than as individuals or families), as well as the potential transaction costs of making carbon payments. Educate communities about the potential advantages of community and group rights in terms of cost-effectiveness from the carbon buyer’s or intermediary’s perspective, while also discussing the potential implications for internal governance and distribution of compensation.
- Consider the implications of separable, transferrable carbon rights and the institutional structures necessary to support it. If this is to be pursued, devise measures that will protect the interests of forest resource user communities; align the incentives of land, tree, and carbon right holders; and provide all right holders with security of tenure.
- Establish what evidence may be necessary to support carbon rights, e.g., documentary evidence, physical evidence, or oral testimony. Ensure that the evidentiary requirements are low-cost, accessible to forest-dependent communities, and provide for real security of tenure.

- Establish what processes and criteria are necessary for acquiring new carbon rights. If carbon rights are associated with rights to land, trees, and/or other forest resources, are they automatically acquired when those rights are transferred? Is the obligation to manage the land for REDD+ also acquired in the interest of assuring “permanence,” even if the new right holder does not wish to manage their resources to enhance carbon sequestration?
- Tailor law to be more specific about the allocation of resource rights among different claimants, including private right holders and the government. If forests and/or subsurface resources are “property of the state,” articulate in law specifically what rights are given to the state versus other claimants, including rights to carbon benefits. Design equitable and transparent rules and processes for addressing cases where rights may be in conflict (e.g., a state’s right to exploit minerals—and therefore interfere with GHG reduction efforts—versus an individual’s or community’s right to benefit from increased carbon sequestration from soils and trees).
- Assign carbon rights and structure mechanisms to acquire carbon rights to ensure that women and other vulnerable groups benefit. For example, rights assigned to communities might give preference to internal governance mechanisms managed by women and require that carbon payments be made to adult women household members. Allocation of carbon rights and sale of carbon offsets might give preference to indigenous communities. Avoid assigning carbon rights solely to those who have primary rights to forest land, thereby excluding the interests of other resource users.
- Amend laws governing expropriation to: a) explicitly define “public interest” as a rationale for government takings, ensuring criteria are sufficiently narrow to engender tenure security; b) guarantee due process and opportunities to appeal government decisions via an independent judiciary; and c) provide for fair and timely compensation.
- Place restrictions on the awarding of forest concessions and leases, for example, by making them subject to proof of no pre-existing customary claims to forest resources. Provide options for investors to enter into collaborative agreements with local communities, provided these can be regulated and monitored to ensure compliance with free, prior, and informed consultation and other standards of justice and respect for human rights upheld by the USG.

## Complementary Measures

- Support the establishment of systems to document and administer carbon rights, especially in cases where rights are separate from other resource rights and are transferrable. Even where rights are not separable, systems of documentation and registration of land and forest rights may be critical to ensuring obligations to uphold REDD+ commitments are passed on when land/resource rights are transferred.
- Structure and finance pilot activities to test new alternatives for assigning carbon rights to ensure they are fair, effective in achieving anticipated REDD+ outcomes, and cost-effective.
- Enhance REDD+ policies to make payments—whether fund-based or market-based—conditional on: 1) assigning rights to benefit from carbon to forest resource user communities; 2) fair distribution of payments that will yield necessary REDD+ incentives and also improve welfare of the poorest and most vulnerable; and 3) good governance (e.g., limited exercise of government expropriation power, structuring of accountable local governance systems for payment distribution, and mitigation of elite capture) where weak, repressive, or corrupt structures could undermine REDD+ objectives.
- Support the development of community governance systems that are equipped to respond to complex tenure systems and effectively compensate community members for behavior changes necessary to achieve REDD+ commitments. Focus on enhancing transparency, efficiency, and accountability.

- Provide information and awareness-raising to enable communities to understand carbon rights and to more effectively hold government and community authorities accountable to serving their interests.
- Build capacities of forest-dependent communities to negotiate for laws, processes, and contracts that are fair and result in meaningful benefits.
- Establish or improve dispute resolution institutions and mechanisms that can address conflicts over carbon rights and enforce those rights.



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**U.S. Agency for International Development**

1300 Pennsylvania Avenue, NW

Washington, DC 20523

Tel: (202) 712-0000

Fax: (202) 216-3524

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