Legal Frameworks for REDD

Design and Implementation at the National Level

John Costenbader
Editor

IUCN Environmental Policy and Law Paper No. 77

Federal Ministry
for Economic Cooperation
and Development

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Foreword

The IUCN Environmental Law Programme (ELP) sends this book to print just weeks before Parties to the United Nations Framework Convention on Climate Change (UNFCCC) will meet in Copenhagen for the 15th Conference of the Parties (COP) to finalize a new climate agreement to replace or supplement the Kyoto Protocol. Perhaps the best-developed of the new options expected in that agreement, Reducing Emissions from Deforestation and Forest Degradation (REDD) poses a unique opportunity for the world to simultaneously 'get things right' for both climate and forests. In recent years, policy research has grown rapidly in the area of options for designing and implementing REDD regimes, while far less analysis of the legal ramifications of such options has occurred. This is particularly the case at the national level, where perhaps the greatest need for legal and policy understanding relating to REDD is felt already. It is this gap that the ELP aims to address with its latest publication.

This book builds on related experience of the IUCN Environmental Law Centre in the areas of Payments for Ecosystem Services (PES), Land Use, Land Use Change and Forestry (LULUCF) under the Clean Development Mechanism (CDM) of the Kyoto Protocol, Access and Benefit Sharing under the Convention on Biological Diversity (CBD) and climate governance under the UNFCCC. Distilling a wide range of information and insights on REDD and forest carbon PES from legal and policy experts, the publication presents a detailed overview of regulatory design and implementation options specifically for a non-lawyer audience. The report is based on substantive findings from four national case studies carefully chosen for their varying geographies, forest cover and deforestation rates, and stages of REDD preparations.

The study concludes with the finding that although legal clarity is an essential prerequisite for successful national REDD regimes, such clarity does not necessarily require countries rewriting their existing legislative and regulatory frameworks, at least not immediately. Indeed, before creating any new laws, many countries can take essential first steps by removing existing legal norms providing incentives for deforestation and forest degradation. By phasing such work in the coming years in their programs to achieve full REDD functionality, countries will be able to design and implement regulatory systems providing the best fit for their unique national circumstances, be they entirely new legal instruments or amendments, harmonization or reinterpretation of existing laws.

In order to design those systems, countries planning to host REDD activities should however begin integrating legal assessments into their national planning as soon as possible. It is our hope that this book can contribute towards such work and help promote socially positive and environmentally sound REDD project activities, and thus deliver towards the IUCN vision of nature conservation and sustainable development.

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List of Acronyms

ABS	Access and Benefit Sharing
A/R	Afforestation and Reforestation
AFOLU	Agriculture, Forestry and Other Land Use
BAU	Business as Usual
CBD	Convention on Biological Diversity
CP	Commitment Period
CSR	Carbon Sequestration Rights
CDM	Clean Development Mechanism
CER	Certified Emissions Reduction
COP	Conference of Parties
FCPF	Forest Carbon Partnership Facility (World Bank)
GHG	Greenhouse Gas
ILO	International Labour Organisation
IUCN	International Union for Conservation of Nature
LULUCF	Land Use, Land-Use Change, and Forestry
MEA	Multilateral Environmental Agreement
MRV	Monitoring, Reporting and Verification
NAMA	Nationally-Appropriate Mitigation Action
NGO	Non-Governmental Organization
NTFP	Non-Timber Forest Products
PIC	Prior Informed Consent
PES	Payments for Environmental Services
PNG	Papua New Guinea
REDD	Reducing Emissions from Deforestation and Forest Degradation
R-PIN	REDD Readiness Plan Idea Note
R-PLAN	REDD Readiness Plan
UNFCCC	United Nations Framework Convention on Climate Change
VCS	Voluntary Carbon Standard

Part I

Introduction

John Costenbader*

Forests cover about one third of the Earth's land surface,[1] and provide services and resources supporting human subsistence and well-being. Forest ecosystems are central to the livelihoods, economic development, and cultural values of many citizens in developing countries. Forests also host a great part of the planet's terrestrial biodiversity and demand conservation and sustainable use.

Forests play an important role in the global carbon cycle, converting atmospheric carbon to organic matter through photosynthesis. Forest carbon sinks store more carbon than both the atmosphere and the world's oil reserves together.[2] But while forests remove carbon emitted by burning fossil fuels, deforestation sends carbon back into the atmosphere. Although many temperate forests are growing, sequestering more carbon, tropical forests are shrinking, releasing the carbon they store into the atmosphere.[3]

Carbon emissions primarily from tropical deforestation (i.e., a permanent decrease in forest cover) and forest degradation (i.e., a quality decrease related to factors like vegetation layer, fauna, and soil, or the loss of carbon stocks on remaining forest land) make up an estimated 18 percent of the total anthropogenic greenhouse gas (GHG) emissions in the land use, land-use change and forestry sector.[4] Deforestation not only releases carbon into the atmosphere, but also has a negative impact on biodiversity, watershed and soil protection, and local climate regulation.[5] The loss of the world's tropical forests is likely to have dramatic consequences for the global climate and precipitation system. For example, studies of Australia's drought suggest that deforestation of the continent's native vegetation may have reduced the cooling effect provided by evaporation from the tree canopy in the region.[6]

The social and economic consequences of the loss of ecosystem services provided by forests are also potentially dramatic. Because of deforestation, forest-dependent poor in many regions of the world face increasing difficulties in meeting their basic needs for energy, food, and clean water.

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* Legal Officer, IUCN Environmental Law Centre, Bonn, Germany; with substantial inputs from Annalisa Savaresi (Research Fellow, Faculty of Law, University of Copenhagen); and Gavin Doyle and Simone Schiele (Interns, IUCN Environmental Law Centre, Bonn, Germany).

1 FAO Forest Resources Assessment Programme. (2006). *Global Forest Resource Assessment 2006*. p. 12. Rome, Italy: FAO.

2 *Ibid.,* p. 14.

3 *Ibid.*

4 IPCC. (2007a). *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S. et al. (Eds)]. Cambridge, UK and New York NY, USA: Cambridge University Press.

5 Singh, P.P. (2008). "Exploring biodiversity and climate change benefits of community-based forest management". *Global Environmental Change - Human and Policy Dimensions* 18(3): pp. 468–478.

6 Deo, R. *et al.* (2009). "Impact of historical land cover change on daily indices of climate extremes including droughts in eastern Australia". *Geophysical Research Letters 36: L08705.*

Efforts to halt deforestation in the tropics have so far been largely unsuccessful. However, recent findings suggest that reducing deforestation may be a relatively inexpensive climate change mitigation option, comparing favourably with the costs of lowering emissions in other sectors.[7]

In light of the actual and potential impacts of global climate change, the conservation of developing country tropical forests has taken on new importance at the international level, due to their role in mitigating global climate change. Since 2007, tackling emissions from deforestation has become a centrepiece in negotiations over renewed commitments under the international regime to fight climate change.[8] An effective international mechanism for Reducing Emissions from Deforestation and Forest Degradation (REDD) under the United Nations Framework Convention for Climate Change (UNFCCC) may enable developing countries to merge the goals of national forest protection with their economic development, while helping combat climate change. REDD is therefore an essential element in a viable global climate policy framework, and has gained global attention as a potentially effective and low-cost climate change mitigation option.[9]

This publication identifies and analyzes critical issues in the formulation and implementation of national and sub-national legal frameworks for REDD activities. Lessons are drawn from the wealth of national incentive-based mechanisms for rewarding the conservation of forest and other ecosystem services that have been made conditional on performance criteria – known as Payments for Environmental Services (PES), as well as the main legal options for their effective implementation.

Incentives for the conservation and sustainable use of forest carbon sequestration services are different from PES for other ecosystem services, such as water purification or aesthetic landscape enrichment. Ecosystem services all have to a certain degree the characteristics of public goods, meaning that the service is available to everyone once it is provided (*non-excludable*) and that the consumption of the service by one person does not or not immediately restrict the consumption of the service by other people (*non-rival*). While no pure public good exists that fulfils these characteristics entirely, carbon emission reductions have strong traits of a global public good (i.e., no one can be excluded from the enjoyment of global emissions reductions, nor does enjoyment in one location reduce the availability of emissions reductions elsewhere). Additionally, the intangible nature of carbon emissions reductions poses both mathematical challenges in their quantification, and conceptual challenges for their regulation. As a result, incentives for REDD will require greater, more sophisticated regulatory frameworks than other PES types. Indeed, as this publication will demonstrate, a seamless network of laws will be required for the governance of REDD beyond environmental and forest law, including such legal domains as property, investment and tax law, all of which must be well-integrated and adaptive to new developments in science and policy.

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7 IPCC. (2007b). *Climate Change 2007:* Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Metz, B. et al. (Eds)]. Cambridge, UK and New York NY, USA: Cambridge University Press; *Stern, N. (2006). Stern Review: The economics of climate change.* Cambridge, UK: Cambridge University Press.

8 UNFCCC/COP13, 2007. Reducing emissions from deforestation in developing countries: Approaches to stimulate action. Decision 2/CP.13.

9 *See* IPCC (2007b), *supra* note 4; *see also* Stern, *supra* note 4.

From an economic perspective, carbon (or its reduction in emissions) is a "model commodity", as it only has one characteristic, which is its price. Once it is sold on an international market, regardless of where a reduction occurs, it will lack identifying characteristics or unique features that sellers could use to compete amongst each other. Therefore, sellers will be forced to compete based on price.[10] Such price competition, despite potential trade barriers and regulatory restrictions in importing Annex I countries[11], is expected to favour tropical forest countries among developing countries, as especially good conditions for forest growth in such countries should allow them to offer lower prices. Nonetheless, stiff competition among developing tropical forest countries selling credits is likely to occur. Countries with more stable investment environments, land ownership and use rights, and clear, well enforced regulatory frameworks are expected to reap the greatest opportunities from REDD.[12]

For successful REDD regimes, national governments should guarantee that forests remain intact and standing on a permanent basis. This outcome is more likely to occur via: fair and effective treatment of ownership and land ownership and use rights; benefit sharing; monitoring, reporting, and verification (MRV); access to information; and guarantee of public participation in future REDD national legal frameworks. Although the greatest attention currently focuses on changing the behaviours of countries with the highest deforestation rates, a well-designed international REDD regime should also seek to reward countries traditionally maintaining their forests, so that they are not under pressure to cut their own forests. Furthermore, while the international REDD regime may focus primarily on carbon stocks and flows, the national legal frameworks should approach REDD within the broader concept of governance of ecosystem services, accounting for the intrinsic values of forests and their services.

10 Scherr, S. *et al.* (2004). *For Services Rendered: The current status and future potential of markets for the ecosystem services provided by tropical forests,* p. 55. ITTO Technical Series No 21. Yokohama, Japan: International Tropical Timber Organization (ITTO).

11 Annex I countries are developed countries with binding greenhouse gas emissions targets under the Kyoto Protocol, and for the sake of this study which are assumed to have similar targets under a future climate agreement including a REDD regime.

12 *Ibid.*

1. Drivers of deforestation and forest degradation[13,14]

Globally, a variety of direct and indirect deforestation drivers contribute to the current rate of global deforestation. Deforestation is driven chiefly by agricultural conversion, forest product and natural resource extraction and infrastructure development.[15] Forest degradation is largely driven by the overuse of forest resources. In both scenarios, perverse incentives in regulations over land and natural resources may play a substantial role as drivers of deforestation and forest degradation.

Before enacting any legal reform for forest conservation-related goals, governments would do well to examine their laws and policies with a view to identifying any internal drivers of deforestation and forest degradation. Ideally, new policy interventions providing "positive drivers" should be designed to address both direct and indirect drivers of deforestation and forest degradation, which should start by removing any existing perverse incentives in national and sub-national laws.

In a broad sense, the creation of incentives for the conservation and sustainable use of ecosystem services is a correction of governments' past failures to internalize environmental and social externalities (i.e., those costs caused by production and consumption that are not compensated by the actual price of a good in the market but paid for by actors outside the market transaction itself). Regulatory and market failures account for the majority of environmental problems suffered by humans, including climate change.[16] Not only have governments worldwide historically not internalized costs such as those for carbon emissions in forest management policies, but many have offered incentives (hereafter "perverse incentives") for short-term economic growth that have exacerbated negative impacts on environment and society.

Fundamentally, the opportunity cost of avoiding deforestation (i.e., the lost profits that could have been achieved by cutting down forest) is generally very high, which can serve to nullify conservation efforts. Lack of foresight and commercial awareness has rendered some forest conservation PES

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13 Watson, R.T, Noble, I. and Bolin, B. (Eds) (2000). Land Use, Land-Use Change and Forestry. A Special Report of the IPCC. Cambridge, UK: Cambridge University Press. (The IPCC has defined deforestation as the "permanent removal of forest cover and withdrawal of land from forest use, whether deliberately or circumstantially," and deploys a minimum crown cover criterion of 10 percent to differentiate between forests and non-forests. If crown cover is reduced below this threshold, deforestation has occurred. The IPCC could not agree on a definition for forest degradation.) For a review of definitional issues associated with the term deforestation, *see* IPCC. *Definitions and Methodological Options to Inventory Emissions from Direct Human-induced Degradation of Forests and Devegetation of Other Vegetation Types.* IPCC National Greenhouse Gas Inventories Programme, Kanagawa, Japan

14 FAO (2007). *Definitional issues related to reducing emissions from deforestation in developing countries,* (2007), p. 10. FAO, Rome (defining forest degradation as "changes within the forest class [...], which negatively affect the stand or site and, in particular, that lower the biological productivity capacity and diversity"). Although more subtle than deforestation, degradation results in significant carbon emissions, but it is comparatively more difficult to identify and monitor forest degradation than deforestation.

15 *See generally.* Geist, H. Lambin, E. (2001). *What drives tropical deforestation? A meta-analysis of proximate and underlying causes of deforestation based on subnational case study evidence.* International Geosphere-Biosphere Programme (IGBP LUCC Report Series; 4 Louvain-la-Neuve.

16 Karousakis, K. (2007). *Incentives to reduce GHG emissions from deforestation: lessons learned from Costa Rica and Mexico,* p. 17. Paris, France: OECD.

schemes relatively worthless, as the incentives provided could not compete with agricultural profits.[17]

The persistent availability of various subsidies, tax incentives, and under-priced public lands and natural resources for agricultural activities, including timber and first generation biofuels, ensure that government measures supporting income generation from forest conservation cannot effectively function. Similarly, government financial policy works against REDD objectives when providing funds to roads, hydropower development, and other public works that can fragment, and lead to mass migration into, forest areas. Governments have used land ownership and use rights policies to encourage land uses other than forest conservation, and often fragments of such policies remain in tax and property codes, undermining new national carbon sequestration goals. As Table 1 shows, countries examined in the case studies (Brazil, Cameroon, Guyana and Papua New Guinea) and Indonesia (which is included in the table due to its significant forest carbon emissions) show a range of the deforestation and forest degradation drivers described above, as well as unique policy and law variables that have historically fed into those drivers.

Table 1: Illustration of policies behind recent deforestation drivers

Country	Main driver(s)	Key underlying policy and law variables
Guyana	• Mineral exploration	• Income tax law allows a developer to gain a tax reduction for expenditures in clearing trees.
Indonesia	• Export of wood and processed wood products • Illegal logging • Oil palm and small-scale rubber plantations • Population growth • Forest fires in dry El Niño years	• Export tariffs on round-wood were used to expand the wood-processing industry in the 1980s and 1990s. This achieved the desired result but resulted in inefficient use of resources and increased deforestation. • In 1998 following the Asian financial crisis, Indonesia was requested by the IMF to abolish export tariffs, which mobilized international trade but triggered extensive deforestation. The result was an increase of over 200 percent in log exports from 1991–1997 to 2000. • A 1980s transmigration policy allowed 26.6 million hectares of land to be converted to other uses.
Cameroon	• Agricultural intensification • Population growth • Shifting cultivation	• A 1985 economic recession spurred a demand for food crops in the country, with increased deforestation as a result.

▶

17 In fact, many PES studies failed to even consider what the opportunity cost of a PES scheme for landowners was. *See* Wertz-Kanounnikoff, S. and Kongphan-Apirak, M. (2008). *Reducing emissions in Southeast Asia: A review of drivers of land-use change and how payments for environmental services (PES) schemes can affect them,* p. 14. Working Paper No. 41. Bogor, Indonesia: CIFOR.

Country	Main driver(s)	Key underlying policy and law variables
Brazil	• Land ownership and usage incentives • Agriculture and cattle pasture • Bio-fuel plantations • Roads • Hydropower	• From the 1960s to the 1980s, the Brazilian government promoted occupation and development of public lands in the Amazon with massive infrastructure, land titling tax incentives and "free-trade zones". • Recent programmes such as the National Institute for Colonization and Agrarian Reform in Brazil, and federal law encourages land exploitation by enabling land users to obtain legal title (usucapião) over land they have developed and used for five *uninterrupted* years. • The devaluation of the Brazilian *real* made Brazilian beef more competitive, but also doubled the price for beef, creating an incentive for ranchers to expand pasture areas.
Papua New Guinea	• Illegal logging	• Although forestry laws are in place, 90 percent of all logging in PNG is estimated to be performed illegally, due to lack of prior and informed consent by traditional landowners and the failure of the PNG Government to follow and enforce its own forestry laws.

Sources: Brann (2002); Government of Indonesia (2007); Westholm *et al.* (2009); Pfaff (1997); Brazilian Art. 1239, Law no. 10406/2002; Brown (2008).

Conversion of forested land into agricultural land is highly profitable in tropical developing countries with fertile land and inadequate regulatory checks. Such market failures are rendered more severe by the increased profitability attached to conversion of standing forest land *vis-à-vis* degraded land (as the conversion of standing forests obtains potentially greater revenue from the sale of timber, which can be used to finance the operation). Therefore, if the conversion of already degraded lands were made financially more attractive, this could ensure some protection for standing forests.[18] Contracts or regulations offering payments for carbon sequestration services could assist in incentivizing conservation rather than deforestation.

In addition to removing existing perverse incentives in national and sub-national laws, governments should learn from their mistakes by ensuring greater strategic planning in the development of new incentives, as unintentional negative side effects may be present even in seemingly beneficial laws. In this regard, integrated decision-making tools such as Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) can ensure legal incentives are developed with greater foresight. At the sub-national and community level, participatory land-use planning offers another legal mechanism to ensure incentives do not result in unintended harmful outcomes.

18 *Ibid.*

2. Legal clarity and national capacity for REDD

Regardless of the form of a post-2012 climate agreement, national laws and regulations are likely to play a key role in creating and guiding REDD systems on the ground. Once a future global REDD regime is established, it is essential that it operates within national legal frameworks that are customized to the specific needs of each country, but which strive to achieve the "three e" REDD goals of equity, efficiency, and effectiveness, as well as clarity. To date, national legal frameworks are often characterized by a general lack of clarity and a wide diversity in instruments guiding the reduction of emissions from deforestation and forest degradation, deterring potential funders and constituting an obstacle to the overall functioning of such systems.

In most countries currently expected to host REDD projects and the four countries in the case studies presented in this volume, REDD pilot projects currently fall within the scope of existing forestry legislative decrees and regulations, as well as national climate change policies, which are not legally binding. Governments in these situations generally have two options, either to re-frame existing forestry laws to include climate mitigation benefits, or to create a new REDD law. Both approaches can potentially lead to conflicts and confusion about the applicable law, if countries fail to provide for appropriate coordination.[19] In countries with federalist systems, such as Brazil, or in highly decentralized government systems, uncertainty may arise from conflicting federal and state government decrees and can add yet another element of confusion for project participants.

Under the World Bank Forest Carbon Partnership Facility (FCPF), which aims at building capacity for REDD, non-binding aspirational REDD national policy documents such as Readiness Plan Idea Notes (R-PINs) and Readiness Plans (R-PLANs) are being developed. Various criticisms have been raised for an alleged lack of adequate consideration of governance issues in REDD R-PLANs, levelled against both the World Bank FCPF that is responsible for approving these plans and many of the countries responsible for their drafting,.[20]

The same general lack of clarity is true of national frameworks for REDD projects under development in anticipation of an international post-2012 climate agreement. To date, only Indonesia has developed a single piece of national legislation entirely devoted to REDD with a supporting national REDD revenue-sharing regulation, although no projects have yet tested it in practice.[21] The passage of legislation on climate change[22] and protected areas[23] in the Amazonas State in Brazil gave project participants clear guidelines for the design and distribution of project benefits for the pilot

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19 Rosenbaum, K.L., Schoene, D. and Mekouar, A. (2004). *Climate change and the forest sector. Possible national and subnational legislation,* pp. 21-24. FAO Forestry Paper 144. Rome, Italy: FAO.

20 *See generally,* Davis, C. *et al.* (2009). "A Review of 25 Readiness Plan Idea Notes from the World Bank Forest Carbon Partnership Facility". WRI Working Paper. Washington DC, USA: World Resources Institute; *see also* Dooley, K. *et al.* (2008). "Cutting Corners: World Bank's forest and carbon fund fails forests and people".

21 "Procedures for Reducing Emissions from Deforestation and Forest Degradation", Minister of Forestry Regulation P.30/2009, 1 May 2009, Indonesian Minister of Forestry (hereafter "Indonesian REDD Regulation"); "Procedure for Revenue-Sharing in REDD Projects", Minister of Forestry Regulation P. 36/Menhut-II/2009, Indonesian Ministry of Forestry (hereafter "Indonesian REDD Revenue-Sharing Regulation").

22 *Law for the State Policy for Climate Change* (Lei da Politíca Estadual de Mudanças Climáticas, PEMC-AM) Law, no. 3.135 (June 5, 2007), State of Amazonas.

23 State Protected Areas System (Sistema Estadual de Unidades de Conservação, SEUC-AM), State of Amazonas.

project. In this connection, the case study on the Juma Project in Amazonas offers an example of how synchronized federal-state policies on REDD can help facilitate REDD project design and management.[24]

Capacity building and legal drafting will need to be tailored to the various developing countries that are most likely to host REDD projects. Although some such countries have sophisticated legislative and regulatory frameworks in place, they historically suffer from inadequate enforcement and rule of law (e.g., Brazil). Others may have underdeveloped or anachronistic legislative frameworks for environmental and natural resource management (e.g., many African countries).

Despite the potential for forest carbon sequestration to harness vast sums of private capital under a future agreement, markets are not perfect and thus require well designed legal and policy frameworks to guide them properly. This is especially significant in the case of countries likely to host REDD programmes, where rule of law and institutions are weak and corruption is rife, as seen in Table 2.

24 Hall, A. (2008). "Better Red than Dead: Paying People for Environmental Services in Amazonia". *Phil. Trans. R. Soc. B.* 363(1498): 1925–1932, at 1928; *see also* Baker & McKenzie. (2009). "Background Analysis of REDD: Regulatory Frameworks", pp. 53–54. Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Sydney, Australia: Baker & McKenzie.

Table 2: Recent trends (2002 – 2005) in selected governance indicators for the eight countries representing 70% of total emissions from land use identified by Stern (2006)*

Country/Governance Indicator	Year	Bolivia	Brazil	Cameroon	Congo D.R.	Ghana	Indonesia	Malaysia	PNG	AVG
Government Effectiveness[1]	2005	23.9↓	55.0↑	21.5↓	1.0↓	53.6	37.3↑	80.4↓	16.7↓	36.18↓
	2002	35.4	53.6	25.8	1.4	54.5	34.0	80.9	21.5	38.39
Regulatory Quality[2]	2005	32.7↓	55.0↓	23.3↑	4.5↑	49.5	36.6↑	66.8↓	19.8↓	36.03↓
	2002	47.8	61.1	21.7	4.4	44.3	23.6	67.5	35.5	38.24
Rule of Law[3]	2005	27.1↓	43.0↓	15.5↑	1.0↔	48.3	20.3↑	66.2↑	18.8↑	30.03↑
	2002	29.8	43.3	10.1	1.0	49.0	18.3	66.4	14.9	28.85
Control of Corruption[4]	2005	23.6↑	48.3↓	8.4↓	3.0↑	45.3	21.2↑	64.5↓	12.8↓	28.39↓
	2002	22.5	54.4	10.8	2.0	44.6	6.9	66.7	25.0	29.11

* This table shows the percentile rank on each governance indicator. Percentile rank indicates the percentage of countries worldwide that rate below the selected country (subject to margin of error). Higher values indicate better governance ratings. Percentile ranks have been adjusted to account for changes over time in the set of countries covered by the governance indicators.

1 Government effectiveness measures the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

2 Regulatory quality measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

3 Rule of law measures the extent to which agents have confidence in and abide by the rules of society, in particular the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence.

4 Control of corruption measures the extent to which public power is exercised for private gain, including petty and grand forms of corruption as well as "capture" of the state by elites and private interests.

Source: Estrada Porrúa *et al.* (2007)

3. National law basis for REDD: an overview

Before drafting new legal instruments to move towards the “three e” goals described above, countries should assess their current legal frameworks for compatibility with the purposes of REDD and to determine whether opportunities or bottlenecks to REDD activities already exist. As the previous sections showed, coordination and streamlining of existing legislation regarding REDD is a crucial prerequisite for an effective REDD system.

3.1 Constitutions

As the set of lasting principles upon which a country’s entire government is built, constitutions are not typically written with the level of detail to affect specific environmental programmes such as REDD.

However, national constitutions often recognize the importance of environmental protection and the services that forests and other ecosystems provide, thus creating an enabling environment for REDD and other PES forms. Additionally, more detailed constitutions (such as in Brazil) can provide enabling provisions for such programmes as REDD, but implementing legislation is necessary to institute these constitutional provisions so as to provide a more detailed legal basis for the implementation of these programmes and to avoid ambiguity. From another perspective, one should bear in mind that a national constitution is usually the supreme law of a country, and any legal provision found in conflict with the constitution subsequently may be struck down as unconstitutional. Thus, while it is not necessary that REDD or other environmental services be mandated constitutionally, at a minimum legal due diligence must be performed to ensure that the constitution will not prevent the development of such schemes (for instance, in term of constitutional limitations to decentralization). Finally, national constitutions can provide useful guiding concepts for REDD, such as general rules on land and forest ownership and use rights, and the recognition and protection of local and indigenous communities' rights and interests.

3.2 REDD law

Countries may decide to enact a single law or regulation to cover REDD comprehensively, as well as to promote and implement it as a national policy. To date this approach has only been taken by Indonesia, which adopted a REDD regulation in May 2009, and in July 2009 an accompanying revenue-sharing regulation. Having one legal document on REDD has a special advantage of clarity in attracting international investment, as opposed to a combination of relevant environmental laws. Even when a single legal instrument specifically addresses REDD, it will still be necessary to conduct a comprehensive analysis of all relevant existing legal and institutional frameworks (i.e., relating to forests or any other relevant ecosystems under a future REDD regime) to avoid any contradictions. Amendments to existing legal instruments may be necessary where conflicts are found. In particular, pre-existing laws providing for perverse incentives or mandating institutions contrary to the spirit of the new REDD law (i.e., supporting deforestation and forest degradation) should be modified or repealed to the extent possible.

3.3 Relevant existing environmental law

If national legal or political circumstances make the creation of an entirely new law on REDD unfeasible, then an alternative option would be to integrate legal mechanisms for the development, implementation, and control of REDD activities into existing environmental laws. Such laws would include both general environmental laws, such as a national environmental policy act, as well as those laws targeting specific sectors, such as the national forest law and its implementing regulations. Existing national efforts to tackle deforestation in the tropics involve a mix of regulatory, economic, and informational policy instruments. The main purpose of such regulation is to maintain forest cover by proscribing deforestation and prescribing reforestation. Regulations can be supported by phytosanitary prescriptions[25] and economic incentives to address the market drivers for deforestation. The integration of REDD in existing laws could be achieved by reviewing existing

25 Phytosanitary regulations restrict or ban the import or marketing of certain plant species or plant product derivatives in order to prevent the spread of plant pathogens or pests that such plants may carry.

economic incentives and by removing incentives supporting deforestation and forest degradation. This process may prove less contentious politically, and more cost-effective from a legal viewpoint, but requires careful coordination to avoid overlap and conflicts.

3.4 Other laws with indirect relevance

Depending on the type of the national REDD regime, national REDD law(s) or legal provisions will also need to be supported by existing policies and incentives in other sectors. As mentioned previously, any existing perverse incentives such as in agricultural, tax or investment law should be amended to avoid legal confusion and conflict with REDD objectives. In the case of federal systems, whether a single REDD law or REDD legal provisions are put in place, there should be harmony between federal laws and state laws in full respect of relevant constitutional provisions.

Next, supporting programmes established in the general REDD legal framework should be given legal and regulatory effect, such as: land-tenure evaluation programmes; capacity-building initiatives; information and public participation safeguards; benefit-sharing mechanisms; and MRV guidelines. New institutions and funds must be created (or existing institutions charged with new tasks and funds adapted to the context of REDD) to administer the new regulatory framework for REDD at the national level.

Given the infancy of REDD experiences, however, it is important to allow time for governments to experiment and learn from experience in pilot projects, as well as to build capacity of the administration and relevant stakeholders. A preliminary "trial and error" phase of REDD will offer governments an opportunity to refine more precise legal instruments needed for implementation at the national and sub-national level of REDD activities.

4. Contribution of the study to current REDD planning and debate

This book addresses broadly the key legal issues underpinning national incentive-based systems for reducing carbon emissions from deforestation and forest degradation, and focuses specifically on considerations and guidance in developing national legal frameworks on REDD. Chapter 1 examines legal issues related to land ownership, access and use, demonstrating connections between land title and use rights, permanence of carbon sequestration, and REDD project risk. Legal issues related to participation of relevant stakeholders (mainly investors, landowners, and local and indigenous communities) in REDD activities are examined in Chapter 2, focusing both on participation in REDD-related decision making, and on participation in the implementation of REDD activities. Chapter 3 addresses legal issues in benefit sharing, taking into account the numerous factors that are still to be decided at the UNFCCC level. It provides a range of options for national policy and law makers as well as key safeguards to ensuring successful REDD regimes. Chapter 4 provides an overview of legal considerations relating to additionality and permanence, which together aim to ensure a close correlation between emissions reductions occurring on a national level and carbon credits earned at an international level. Finally, the checklists provided in Annex I offer a quick reference tool to reviewing the steps and recommendations provided throughout the book's substantive chapters.

The national case studies in this volume cover a broad spectrum of key players in the tropical rainforest carbon community, with two countries in South America, one in Africa and one in South East Asia,

as well as diverse national perspectives on REDD in UNFCCC negotiations. Additionally, the cases show a wide range in REDD readiness levels, particularly as far as national legal frameworks are concerned. Guyana and Papua New Guinea are at an early stage in REDD planning, with recent climate policies expressing general national aspirations and existing national forestry laws providing only hypothetically-related binding legal provisions. Cameroon lacks laws specifically addressing REDD, but has REDD pilot project experience to help inform the development of a new REDD legal framework. The case of Brazil demonstrates that federalism, while allowing for more diverse state experiences in testing REDD programmes, can also result in a complex mix of federal and state laws on climate and forestry that increase transaction costs and add legal uncertainty to project proponents.

1 Ownership of Land, Forest and Carbon

Annalisa Savaresi* and Elisa Morgera**

1.1 Introduction

Forest ownership is normally associated with land ownership.[1] In developing countries, where REDD projects are being envisioned, often land title is not validly vested in local users, and land use arrangements are poorly defined and recorded. Both in Brazil and Indonesia – the countries with the largest carbon emissions in the forest sector – the relationship between customary and statutory rights in land is problematic.

REDD projects face high investment risks where land ownership challenges exist. It is difficult to reward the relevant actors or owners without clear land title and properly designed regulatory systems that define the ownership of carbon in light of national or local conditions. Unclear land titles are likely to result in confusion over benefits and increase project risk. It is therefore helpful to begin an analysis of REDD regulatory frameworks with a discussion of land ownership and use rights, as well as proprietary interests in the services or elements that carbon sequestration represents.

1.2 Land and forest ownership and use rights

Property entails a "system of relations between individuals (…) that involves rights, duties, powers and privileges".[2] In Western legal traditions, property rights are characterized by exclusivity, inheritability, transferability, and enforcement measures. Property rights over land are usually registered to ensure security in transactions and clear allocation of responsibility.

Because of its unique and immovable nature, land is frequently subject to simultaneous uses, which may include passage, hunting, grazing, cultivation, and access to forests or underground resources. As a result, land owners do not enjoy total freedom over the use of land. Restrictions on land uses may come from planning, public health, and environmental legislation.

Equally, subjects and entities other than the land owner may have use rights over forests, such as rights of access, management or harvest. Thus, identifying "the land owner" only tells part of the story of who has the power to affect the carbon stock in a forest.[3] In this connection, clear, long-term use

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1 Romano, F. and Reeb, D. (2006). *Understanding forest tenure: what rights and for whom?*, p. 3. Rome, Italy: FAO.

2 Hallowell, A.I. (1943). "The Nature and Function of Property as a Social Institution". *Journal of Legal and Political Sociology* 1: 115–138, at 119.

3 Christy, L.C. *et al*. (2007). *Forest Law and Sustainable Development. Addressing Contemporary Challenges through Legal Reform*, p. 29. Washington DC, USA: World Bank.

rights may not significantly differ from full ownership. Much depends on the specific content of the rights, and on the conditions under which the owner, or state authorities, may withdraw them.[4]

1.2.1 Customary rights vs. statutory rights

In developing countries, the presumption of exclusive, transferable, alienable, and enforceable land property rights may be inaccurate and potentially misleading.[5] In numerous tropical forest countries, statutory or formally recognized property rights, explicitly acknowledged by the law, coexist with informal land uses, regulated by customary rules.[6]

Historically, customary rules have their origin in the use of land over a long period of time and were developed to allocate the use of important resources, such as land and water. Rights recognized under customary rules may not have equivalents in formal law. In most countries the interaction between customary rules and formal law can be highly problematic. Many countries have dual and overlapping systems of customary and statutory rights that lead to disputes between competing claimants. This undermines the security of both customary and statutory rights.[7]

A particularly complex situation arises when statutory rights do not take into account existing customary uses. In many developing countries there is a considerable gap between formal right holders and actual land users. The vast majority of land in Africa, for example, is still regulated by customary rules, and several types of land users do not enjoy formal and secure rights over the land on which they depend for their subsistence.[8]

Subjects with insecure land rights face the risk that their rights could be threatened by competing claims, and even lost as a result of eviction. Secure rights encourage people to invest in land and develop businesses, homes and communities. In addition, as land is the primary means of subsistence and income generation in rural economies, households without secure rights in land are significantly impaired in their ability to secure sufficient food and to enjoy sustainable livelihoods. The formalization of customary rights may therefore be crucial to protect vulnerable groups.[9]

This predicament is particularly relevant to forests. By its very nature, forestry needs medium to long-term investments to produce sustainable returns.[10] Insecurity over the allocation of forest resources undermines sound forest management, as without secure rights, forest users have few incentives – and often lack legal status – to invest in protecting forests. Secure forest and land rights are therefore a prerequisite for ensuring sustainability, as well as accountability and control over forests. As the

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4 Cotula, L. and Mayers, J. (2009). *Tenure in REDD - Start-point or afterthought?*, p. 14. London, UK: International Institute for Environment and Development.

5 Feder, G. and Feeny, D. (1991). "Land Tenure and Property Rights: Theory and Implications in Development Policy". *The World Bank Economic Review* 1(5): 135–153, at 135. Note that 'alienable' can be defined as "able to be transferred to new ownership." (New Oxford Dictionary of English, 2001)

6 FAO, (2002) *Land tenure and rural development*, p. 11. Rome, Italy: FAO.

7 Christy *et al*., *supra* note 5, p. 38.

8 Deininger, K. (2003). *Land policies for growth and poverty reduction*, p. 2. Washington DC, USA: World Bank.

9 White, A. (2004). "A framework for assessing tenure security". In: Ellsworth, L. and White, A. *Deeper roots: strengthening community tenure security and community livelihoods*, p. 14. Washington DC, USA: Ford Foundation.

10 FAO. (2006). *Better forestry, less poverty: A practitioner's guide*, p. 9. Rome, Italy: FAO.

chapter on benefit sharing in this volume will illustrate, these arrangements need to be supported by measures enabling forest dwellers and users to gain from sound forest management. In fact, the hypothesis that people would conserve forests if they controlled them may not hold when alternative land uses provide higher benefits than forests.[11]

The challenge to identify and secure rights in land is a common feature of many developing countries. Growing population density, agriculture-related increases in land value, and technological advances are likely to enhance the benefits from creating more precise property rights in land.[12] Over the years, several tropical forest countries have attempted to introduce legal frameworks supporting the formal acknowledgement of customary land rights. These experiments have faced many challenges and produced mixed results. In Cameroon, procedures aimed at facilitating land titling have proven too cumbersome and expensive for customary users. As a result, these groups frequently do not have legitimate title to the lands upon which they live and on which they depend for their subsistence. They may thus be exposed to eviction and relocation, without any resort to legal remedies to protect their customary rights. On the other hand, as the case of Papua New Guinea exemplifies, incorporation of customary rights in formal legislation, which is not supported by adequate enforcement and incentive mechanisms, may have no significant impact on deforestation either.

Box 1.1 Customary property rights in Papua New Guinea

In Papua New Guinea, customary rights in land are recognized in the constitution and 97 percent of land belongs to customary owners. However, the allocation of commercial logging concessions takes place under governmental control, and domestic legislation restricts customary owners' participation in the negotiation of logging permits. More specifically, the National Forest Authority selects operators and negotiates conditions for timber permits, large-scale agriculture or other land use and forest clearing activities (Forestry Act 1991 section 7(1)(e)). The National Forest Authority buys timber rights from landowners and sells them to logging companies as timber extraction licenses. Although domestic legislation recognizes the rights of customary owners to forest resources, landowner representatives often have little understanding of the agreements they enter. In 2001, an independent review on forestry projects in Papua New Guinea concluded that in most cases landowners did not have adequate information to make an informed decision regarding the transfer of their forest management rights to the National Forestry Authority. The report also pointed out that many agreements were obtained without following prescribed procedures to obtain landowners' consent. In several cases, landowners were not issued with appropriate certificates and copies of agreements negotiated with logging companies, thus making subsequent legal challenges extremely

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11 Tacconi, L. (2007) "Decentralization, forests and livelihoods: Theory and narrative". *Global Environmental Change* 17(3–4): 338–348, at 343.

12 Feder and Feeny, *supra* note 8, p. 138.

difficult. As a result, customary owners had no remedies to take action against breaches of concession agreements. REDD projects in Papua New Guinea face analogous challenges. The need to protect customary owners from abuses has already become manifest in a recent episode relating to fraudulent forest carbon contracts.

Sources: Forest Trends (2006); Vegter (2005); Australian Conservation Foundation and the Centre for Environmental Law and Community Rights (2006); Sydney Morning Herald (2009).

The processes that shaped the development of land rights in developing countries are very salient to the debate on REDD. Secure forest and land rights are an indispensable precondition to ensure the long-term permanence of forests and of the carbon sequestered therein. The implementation of REDD projects is likely to bring up the cost of land and attract outside investors. Carbon investments are more likely in countries with well-defined forest and land rights, which are commonly regarded as a crucial indicator of "readiness for REDD".[13] In this context, REDD may provide a powerful impetus to define forest and land rights in tropical forest countries. However, processes aimed at clarifying forest and land rights could go in either direction for non-titled land owners: they could be granted legal rights to their traditional lands, or they may be evicted, as more powerful stakeholders reap the benefits of REDD.

In this connection, the Stern Review on the Economics of Climate Change mentions that defining property rights to forestland and determining the rights and responsibilities of land owners, communities, and loggers is essential to effective forest management for carbon sequestration.[14] The review also stresses the need to involve local communities in forest management and to respect informal rights and social structures. Along similar lines, the Eliasch Review asserts that while there may be trade-offs between environmental and social goals in the short term, long-term sustainability means that new models of land use will need to benefit poor people and forest communities.[15]

The implementation of REDD projects will require clarifying and securing land and forest rights. These reforms will render the protection of the rights of forest-dependent people most urgent.[16] This is not only a consideration of justice, but also of opportunity. Forest dwellers and users excluded from the benefits of REDD are likely to resist the implementation of projects for fear that they will further curtail the exercise of their customary rights and threaten their subsistence practices and traditional livelihoods. Lessons learnt through forest conservation efforts may provide a useful term of reference for REDD in this regard.[17]

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13 Westholm, L. *et al*. (2009) *Assessment of existing global financial initiatives and monitoring aspects of carbon sinks in forest ecosystems –The issue of REDD*, p. 36. Focali Report 2009:01. Gothenburg, Sweden: Forest, climate & livelihood research network.

14 Stern, N. (2006). "Executive Summary". In: Stern, N. *The Economics of Climate Change: The Stern Review*, p. 16. Cambridge, UK: Cambridge University Press.

15 Eliasch, J. (2008). *Climate Change: Financing Global Forests. The Eliasch Review*, p. 53. London, UK: Office of Climate Change.

16 *Ibid*., p. 192.

17 *See generally,* Savaresi, A. (2009) "A Rights-based Approach to Forest Conservation". In: Greiber, T. (Ed.). *Conservation with Justice: A Rights-based Approach.* IUCN Environmental Policy and Law Paper No. 71. Gland, Switzerland: IUCN.

Key message: Secure forest and land rights are an indispensable precondition to ensure the long-term permanence of forests and of the carbon sequestered therein. Customary ownership over lands and forests should be fully taken into account in the development and implementation of statutory rules on ownership, with a view to supporting the interests of vulnerable groups.

1.2.2 Private ownership and use rights

Ownership rights may be distinguished between public and private. Public ownership may be identified as that of land owned by central, regional or local governments. The public category may be further divided into two subcategories: lands administered directly by government entities, and lands allocated for management purposes to communities or indigenous groups on a permanent or semi-permanent basis. Although the distribution of rights between government and community is different in almost every country, invariably governments retain some rights of access and management over public lands. Examples of this type of arrangement include tracts of government lands reserved for indigenous peoples in Brazil.

Private ownership is generally characterized by rights that cannot be unilaterally extinguished by government, without some form of due process and compensation, and only when this is necessary for overriding public reasons.[18] Owners of private property typically have rights to access, alienate, manage, dispose of resources and exclude outsiders. The private ownership category may also be divided into two subcategories: land owned by individuals and firms, and land owned by indigenous or other community groups. The collective ownership category includes "community-based property rights", through which the state recognizes the community's full authority to define and allocate property rights within its particular area of ownership.

Private land property rights have evolved gradually in response to increases in land value and in benefits to be derived from more precise and secure land rights. Private rights bearers generally have much stronger claims to the benefits and opportunities generated by their forests.[19] However, private rights are more secure only insofar as they are not heavily controlled or easily expropriated by government. Even when private property rights are formally recognized, in fact, they may be very limited in practice. Rights may be revoked for public purpose, even without the payment of compensation. This kind of arrangements blurs the distinction between private and public ownership. In both categories, the crucial feature for REDD is clear attribution of entitlements and responsibilities between forest users.

Another consideration crucial to the establishment of REDD is that of addressing perverse regulatory incentives working against carbon sequestration. In many tropical countries, legal protection of land title is conditional on the ascertainment of "productive use" requirements. The recent land titling reform in Brazil provides a clear example in this connection. Brazil has recently undertaken an initiative for establishing land title in vast sectors of the Amazon Forest, with the aim to clarify long-lasting disputes over occupied public land. The reform is proving extremely contentious, as illustrated in the

18 White, A. and Martin, A. (2002). *Who owns the world's forests? Forest tenure and public forests in transition*, p. 6. Washington DC, USA: Forest Trends.

19 *Ibid*.

text box below. Some opponents have argued that the reform remunerates unlawful practices and creates the expectation that rule makers will adopt such measures again in the future, undermining the implementation of existing norms.[20] A first step to controlling deforestation and forest degradation should therefore be to eliminate provisions that require forest clearing for establishing and securing property rights, thus effectively delinking secure land rights from deforestation.[21]

Box 1.2 Land titling in the Brazilian Amazon

During the 1970s and 1980s, the Brazilian government granted incentives for the occupation of public land in the Amazon. The incentives led to countless land disputes between the "new" occupiers and traditional users living in the forest. This situation has long fanned popular discontent and has been a major contributing factor to deforestation. The Brazilian government has recently taken a series of initiatives aimed at rectifying the state of widespread irregularity in occupied public land in the Amazon. The latest development was the promulgation of Federal Law n. 11952/2009 in June 2009. The law aims at regularizing holdings of up to 1,500 hectares. Applicants occupying public lands located in rural areas need to meet a series of requirements, including effective practice of agriculture. Occupation must have begun prior to 1st December 2004. The law will donate to users lands of up to one fiscal module (100 hectares) and charge a reduced price for areas between one and four fiscal modules (100 and 400 hectares). Regularized occupants may farm or use the land for grazing and sell it after a minimum of three years. Occupants that do not comply with the contractual rules for using the property (i.e., environmental norms or payment instalments) may lose the land. However, they are entitled to recoup the capital they paid, plus any interests on the capital, based on official interest rates. The reform has attracted several criticisms. According to its opponents, the regularization process maintains perverse incentives to deforestation by permitting land users that breach contract rules to recoup the sums they have already paid. The offer of free land may also trigger the deforestation of new areas. The Attorney General of the Republic has filed an appeal of unconstitutionality before the Brazilian Supreme Federal Court against Federal Law n. 11952/2009. In the meantime, implementation has started with a cadastral survey of affected areas.

Sources: Terra Legal official website: http://portal.mda.gov.br/terralegal/; The Economist (2009); Brito and Barreto (2009); World Rainforest Movement (2009).

Key message: It is essential that rights bearers have a clear and predictable legal basis for claiming the benefits and opportunities generated by their forests. Property regimes that require forest clearing for establishing and securing property rights should be eliminated, thus effectively delinking secure land rights from deforestation.

20 Brito, B. and Barreto, P. (2009). *The risks and the principles for landholding regularization in the Amazon*, p. 4. Belém, Brazil: Imazon.

21 Kanninen, M. *et al*. (2007). *Do trees grow on money? The implications of deforestation research for policies to promote REDD*, p. 39. Bogor, Indonesia: CIFOR.

1.2.3 State ownership vs. decentralization

In many developing countries, forestland is held in state ownership, and access rights are sold to large private logging companies through concessions. Under these agreements, logging companies obtain long-term rights to access and manage forests, harvest timber, and exclude other users. In return, the companies pay royalties or other fees to the government. In many tropical forest countries, governmental agencies have not developed the governance structures and management capacities necessary to ensure effective forest protection. Causes of illegal activities include flawed policy and legal frameworks, lack of enforcement capacity, insufficient data and information about logging operations, and corruption.[22]

To solve these problems, several countries have undertaken reforms increasing local control over forestlands, devolving management and/or use rights to local governments or communities. As a result, and despite the continuing central role of the state, the share of forestlands under local control is increasing.[23]

Decentralization of forest administration to local governments or administrative units, and devolution of rights and responsibilities over forests to groups of local stakeholders are two relatively recent trends in forest governance. Both decentralization and devolution represent efforts to move forest management and decision making closer to the forests and to the people who depend on them or interact with them regularly. This reflects the recognition that forest governance is enhanced if it is informed by local knowledge and if it engages local actors, whether these are public officials or private citizens.[24]

The devolution of property/use rights, combined with support to local governance, may provide a valid support to efforts to curb deforestation. [25] However, the implementation of reforms to decentralize the management of forest resources has been faced with great challenges. While in some countries, such as Nepal and India, the devolution of forest control has produced positive results, in others reforms have been hindered by insufficient devolution, corruption, and failure to ensure that transfers of land titles or use rights were accompanied by adequate management skills and institutional support.[26] Nepal provides a positive experience in this connection.

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22 FAO. (2005). *Best practices for improving law compliance in the forest sector*, p. 7. FAO Forestry Paper 145. Rome, Italy: FAO.

23 White and Martin, *supra* note 23; Sunderlin, W.D., Hatcher, J. and Liddle, M. (2008). *From exclusion to ownership? Challenges and opportunities in advancing forest tenure reform*, p. 3. Washington DC, USA: Rights and Resources Initiative.

24 Christy *et al*., *supra* note 5, p. 83.

25 Kanninen *et al*., *supra* note 27, p. 41.

26 Cotula and Mayers, *supra* note 6, p. 33.

Box 1.3 Community forestry in Nepal

Community forestry has significantly contributed to slowing deforestation and increasing forest cover in Nepal. The 1993 *Forest Act* and the 1995 *Forest Regulation* enabled local communities to manage public forests. Community forest user groups have both rights and duties to manage community forests. Group members are responsible for protecting the community forests from encroachment. They contribute voluntary labour in forest-related activities, clearing unwanted weeds; removing dead, dying, and diseased trees; thinning thick stems and pruning branches to maintain horizontal space between stems; and planting in gaps. Group members may not construct residential buildings, cause erosion or landslides, quarry, collect stone or soil, and catch or kill wildlife. Instead, they are allowed to collect forest products and distribute them among their members, in accordance with the rules stipulated in the operational plan. Group members can use the forest products, sell them internally at a fixed price, and also sell surplus products to outsiders at market prices. The income from the sale of forest products should be deposited in a group fund. Groups are required to spend at least 25 percent of their total forest income on forest management. The remaining funds may be spent on community development activities. Over the years, about 25 percent of Nepal's national forest lands were handed over to more than 14,000 community forest user groups. This operation has reportedly improved forest conditions, social mobility and income generation for affected populations. These encouraging results have prompted the Nepalese authorities to replicate this model of local participation in natural resource management in watershed and buffer zone management.

Sources: Kanel (2007); Singh and Chapagain (2006).

As the case of Nepal illustrates, the devolution of management powers to local users may significantly contribute to slowing deforestation and to increasing forest cover. Even in successful contexts such as this, the challenge is to design mechanisms that enable forest stewards to reap the financial benefits of carbon sequestration.

In particular, the successful establishment of REDD projects will require that rights to land and forest resources be clarified and assigned to stewards capable of controlling and managing forests for carbon sequestration.. In many cases, this will entail strengthening local communities' involvement in protecting forests, and building on links with local actors to control the exploitation of forest resources and enforce regulations.[27] These issues will be covered in further detail in following chapters.

Key message: The devolution of management powers to local users may significantly contribute to slowing deforestation and to increasing forest cover. The successful establishment of REDD projects will require that rights to land and forest resources be clarified and assigned to stewards capable of controlling and managing forests for carbon sequestration.

27 Kanninen *et al*., *supra* note 27, p. 50.

1.3 Nature of ownership rights or interest in the carbon or sequestration benefit

Land ownership does not necessarily coincide with the right to alter forest vegetation and carbon stocks. Although carbon dioxide is a "thing", it is of course the "service" of avoiding carbon dioxide's entry into the atmosphere that is the object of REDD regulations. In this regard, a preliminary policy decision will be to base REDD either on incentives for activities necessary for avoiding carbon emissions (i.e., forest maintenance and protection) or on rewards for those owning the land in which the carbon is found.

1.3.1 Carbon and proprietary interests

Owning an intangible resource, such as actually or potentially sequestered carbon, poses some challenges to traditional property law systems. Legal issues raised by REDD are similar to the ones posed by other governmental incentives to promote good forest stewardship. In this connection, the first question is to establish the nature of rights or interests in the carbon sequestered by forests.

One major consideration relates to whether the property law system in question treats land and natural resources, including ecosystem services, as fundamentally belonging to the state (i.e., public domain) or as wholly belonging to private land owners. A second regulatory issue relating to carbon ownership is whether concessions are granted for ecosystem services such as carbon. The main preliminary questions to establish carbon ownership in a given legislative context are summarized in Box 1.4 below.

Box 1.4 Steps towards establishing carbon ownership in a given legislative context

1. Whether there is any definition of carbon sequestration rights in domestic law.
2. If this is not the case, whether the benefits associated with carbon sequestration are assigned to landowners or to any other subject.
3. What, if anything, needs to be done to protect and maintain unencumbered legal title to the carbon sequestered in a forest. This may include buying or leasing the land, registering certain rights over the land, coming to an agreement with customary owners, or other subjects that may have rights over the land or the forests, or restricting the use of the land or forests to certain purposes for a given amount of time.
4. Whether or not there are any restrictions on the transfer of carbon sequestered in the forest

Source: Streck and O'Sullivan (2007), p. 6.

1.3.2 Location of ownership

The most immediate criterion for allocating carbon ownership is to assign it to the owner of the forest. In this scenario, a first possibility may be that the owner of the forest owns the carbon and that this entitlement does not exist as a separate property right. As a result, the forest owner could not sell or give the carbon away independently of the forest.[28]

If the carbon stock is subject to a *separate, alienable property right*, independent of the property of the forest, the owner could sell that right without conveying forest ownership. This may happen through the sale of a *usufruct* right[29] or *profit à prendre*,[30] governed under the laws concerning land ownership or under general property rules, as in the cases of Carbon Sequestration Rights created by Australian States. In this respect, the ability to obtain a property interest (as distinct from a contractual right) may grant the owner of the carbon right a title that is more clearly enforceable against future land owners. When the ownership of the carbon stock is transferred, new owners may or may not have the right to affect the use of the forest to protect or enhance its existing potential.

Box 1.5 Carbon ownership schemes in Australia

Australian States have introduced legislation recognizing the right to own carbon sequestered from vegetation, conventionally indicated as Carbon Sequestration Rights (CSRs).[31] CSRs may be described as environmental services rights unbundled from other interests in land. The legal nature of a CSR varies between States and depends on specific contractual arrangements and applicable legislation. In New South Wales,[32] Western Australia,[33] South Australia,[34] Tasmania,[35]

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28 Rosenbaum, K.L., Schoene, D. and Mekouar, A. (2004). *Climate change and the forest sector. Possible national and subnational legislation*, p. 32. FAO Forestry Paper 144. Rome, Italy: FAO.

29 *Usufruct* is "the right of enjoying a thing, the property of which is vested in another, and to draw from the same all the profit, utility and advantage which it may produce, without altering the substance of the thing." (John Bouvier. *A law dictionary adapted to the constitution and laws of the United States of America and of the several states of the American Union.* 6th ed. Philadelphia: Childs & Peterson, 1856.)

30 *Profit à prendre* is "the right to share in the land owned by another. In particular, a *profit à prendre* enables a person to take part of the soil or produce of land that someone else owns." (*West's Encyclopaedia of American Law*, edition 2. 2008 The Gale Group, Inc.)

31 The term "CSR" is used for convenience, as each State uses a different term to describe a CSR – in NSW the term CSR is used; in Victoria and South Australia the term "Forest Property Agreement" is used, in Queensland they are called "Natural Resource Products", Western Australia uses the term "Carbon Right", and Tasmania uses the term "Forestry Right".

32 The *Carbon Rights Legislation Amendment Act* (§3) defines a CSR as "a right conferred on a person by agreement or otherwise to the legal, commercial or other benefit (whether present or future) of carbon sequestration by any existing or future tree or forest on the land after 1990".

33 The *Carbon Rights Act 2003* provides a statutory form of CSR created upon registration (§5). The Act allows registration on title in respect of freehold land and Crown land (§6).

34 According to the *Forest Property Act 2000* (§5), a "forest property (carbon rights) agreement separates ownership of carbon rights from ownership of the vegetation to which the carbon rights relate by transferring ownership of the carbon rights from the owner of the vegetation (the transferor) to another (the transferee)".

35 According to the *Forestry Rights Registration Act 1990* (§5), "a forestry right shall, notwithstanding any rule of law or equity to the contrary, be deemed to be a profit à prendre but shall not confer a right of exclusive possession of the land to which it relates".

and Queensland,[36] CSRs give rise to what is commonly called an "interest in the land" under property law. This interest can be registered on land title. In Victoria, CSRs are defined as "the right to commercially exploit carbon sequestered by trees".[37] Although they do not constitute an interest in land, CSRs may be registered on land title.[38] In the Australian Capital Territory and in the Northern Territory, there is no specific legislation, but CSRs may be created through personal agreements between contracting parties. These agreements, however, may not be registered on land title. This lack of consistency between CSR regimes complicates transactions for entities that seek to operate across States. Most States enable parties to register CSRs under the "Torrens Title" system. The system enables parties to register land titles that are paramount over interests not recorded. A CSR registered on land title attains indefeasibility, binding future landowners for the period of registration. Registration on land title serves the purpose of informing prospective land purchasers of the existence of the CSR, and facilitates the creation of associated covenants relating to the maintenance of vegetation. When registration of CSRs on land title is not available, an investor may lose his right to the sequestered carbon, and could only seek to obtain compensation from the land owner with whom he had originally contracted. This risk may be avoided by including in the CSR contract a requirement to provide the investor with prior notice of any intention to dispose of the property. The requirement could be coupled with an obligation to ensure that the new landowner enters into an agreement with the investor on like terms. Even where the law recognizes CSRs as interests in land, it does not regulate liability issues and the allocation of risk for carbon loss. These matters must be dealt with through a contract between parties. CSRs are traded in the New South Wales and Australian Capital Territory Greenhouse Gas Abatement Scheme, one of the world's first mandatory emissions trading schemes. The scheme commenced in January 2003 and is still operating, although it is proposed to cease it when and if a federal emissions trading scheme will come into force. The adoption of a national CSRs regime would greatly facilitate inter-state transactions. In August 2009, however, the Australian Senate rejected a package of bills to establish a federal carbon-trading scheme. The bills are expected to be presented to Parliament again in November 2009.

Source: Australian Greenhouse Office (2005).

Under a completely different arrangement, the carbon sequestered in forests may be treated as a publicly-owned asset, regardless of forest and land ownership. Even where forests are largely private, the state could manage carbon absorption as a public asset and distribute the benefits to the forest owners or users. In this context, the carbon stock may be owned by the national government, or by subnational or local governments. National governments may own the carbon according to different schemes. They may take credit for carbon sequestration and hold it *in trust* for the benefit

36 *Forestry Act 1959* 61(J). In Queensland, carbon sequestration rights do not create an interest in land. Carbon may however be the object of an agreement over the "natural resource products" provided by the forest. The benefited person's rights to the natural resource product are a *profit à prendre* 61(J) §5.

37 *Forestry Rights Amendment Act 2001* (§4).

38 *Ibid.*, (§14).

of forest owners or of the public. The government may or may not have the power to sell the carbon stock or give it away, and to require forest owners to protect or enhance carbon sequestration.[39] In any given case there will be questions about how much regulation of private ownership is politically or constitutionally acceptable, and about the share of benefits that needs to be returned to forest owners.[40]

New Zealand was the first country to allocate forest carbon ownership to government. This experiment proved extremely contentious, as illustrated in the text box. While public ownership has the advantage of clearly assigning liabilities, providing a certain security in transactions, it may have the drawback of alienating forest stewards. This may in turn discourage carbon sequestration.

Box 1.6 Public carbon ownership in New Zealand

In 2002, the Government of New Zealand announced that it would retain sink credits in respect of all forests planted in the country after 1990, for at least the first commitment period of the Kyoto Protocol. This decision caused a great political stir. Organizations representing the forest industry argued that forest owners should also own the carbon stored within their forests. Starting with 2004, a surge in deforestation figures in New Zealand was linked to forest owners' attempts to avoid liabilities associated with the implementation of governmental policy. In 2007 the policy decision was eventually reversed, and credits and liabilities for forest carbon were devolved to forest owners as part of a new emissions trading scheme (NZ ETS).[41] The scheme was passed into law in September 2008. However, following a general election in November 2008, the government put on hold the operation of the scheme and appointed a committee to review the legislation. The existing scheme provides separate regimes for two categories of forests: forests planted before 1990 and forests planted after 1989. Pre-1990 forest owners are automatically included in the scheme and incur emission obligations if, following harvest, they convert their forest to a non-forest use, instead of replanting. The Government initially allocated free credits to such owners, who are required to report deforestation on an annual basis. In case of net deforestation, forest owners are obliged to surrender credits to cover for the emissions. Owners of forest planted after 1989 can choose whether to enter the NZ ETS or not. If they do, they are obliged to take responsibility for net changes in the carbon stocks of their forests. They receive credits if those stocks increase, and are required to surrender credits if stocks decrease, as a result of activities or events such as harvesting or fire. In post-1989 forests, both the landowner and the forestry right holder/lessee must agree to enter into the NZ ETS.

Source: Gould, K., Miller, M., Wilder, M. *Legislative approaches to forest sinks in Australia and New Zealand. Working models for other jurisdictions?* in Climate change and Forests. Emerging Policy and Market Opportunities. (C. Streck, R. O'Sullivan, T. Janson-Smith, R. Tarasofsky eds.), Chatham House, London, 2008.

39 Rosenbaum *et al*., *supra* note 34, p. 33.
40 Christy *et al*., *supra* note 5, p. 121.
41 *New Zealand Climate Change Response Act.*

Regulatory schemes for REDD should clearly determine who owns the right to the carbon sequestered in forests. The text box below schematically summarizes the main options in this connection. In practice other considerations could complicate matters. However, for the sake of expediency, carbon ownership may either be a separate proprietary interest, or a proprietary interest linked to forest or land ownership. The creation of carbon credits separated from land ownership would facilitate circulation on the market. Property rights registered on the land title would grant right holders with remedies against any inconsistent land uses. Where a REDD project creates carbon offset credits, ownership interests in carbon as a distinct entity have theoretical advantages over interests linked to forest or land ownership.

Box 1.7 Forest carbon ownership

The forest owner owns the carbon sequestered in the forest and:

A. The carbon sequestered in the forest may not be sold independently of the forest. However, the owner may undertake the obligation to manage the forest in a way to increase the carbon stock. This obligation could be in the form of:
   1. a contract;
   2. a covenant that runs with the land, binding anyone who owns the property in the future;
   3. a covenant that attaches to a person;
   4. an easement or servitude, which may attach to a dominant estate or to a person. In the latter case, the carbon sequestered in the forest may be transferred independently of any land transfer.

B. The carbon sequestered in the forest is the object of a separate, alienable property right, such as a usufruct right or profit à prendre, governed under the laws concerning land ownership. The owner can sell that right without conveying land ownership. In this context, two options may be envisioned:
   1. The owner of the carbon has the right to affect the use of the forest to protect the existing forest carbon stock, or to enhance it;
   2. The owner of the carbon has no inherent right to affect how the forest is used. However, the land owner may separately grant this right through a contract, or through a covenant or other legal mechanism that "runs with the land" and binds any property owner.

C. As in (B) above, but the right is governed under general contract law

The carbon sequestered in the forest is a publicly owned asset:

A. The government holds the forest carbon stock as trustee for the benefit of forest owners or of the public, with no power to sell it or give it away. In this context, two different options may be envisioned:
   1. The government has no particular power to require landowners to protect or enhance sequestration; or
   2. The government has the power to regulate the use of land to protect or enhance carbon sequestration.

▶

B. The government has the power to sell or give the forest carbon stock away. In this connection, two main options may be configured:
   1. The acquisition of carbon stocks may be open to anybody;
   2. Only a limited number of entities may be eligible to own carbon stocks, such as entities emitting carbon and desiring offsets; "banks" chartered to deal in mitigation credits; NGOs interested in environmental protection; indigenous peoples or other groups of forest stewards.

Source: Rosenbaum *et al.* (2004), p. 32.

Key message: Owning an intangible resource such as actually or potentially sequestered carbon poses some challenges to traditional property law systems. Regulatory schemes for REDD should clearly determine who owns the right to the carbon sequestered in forests. Carbon ownership may either be a separate proprietary interest, or a proprietary interest linked to forest or land ownership.

1.3.3 Separation of carbon rights

Transferable rights over sequestered carbon may require the adoption of specific fraud prevention measures. Buyers of carbon sequestration rights face two kinds of risk.

The first is that the seller does not actually have authority to transfer the right over the sequestered carbon. This could be so because the seller's title was flawed or because the seller has already transferred the potential to someone else. One way to address this concern may be to establish a system to inform potential buyers of who actually owns the carbon. Registration of property interests similar to that provided by Australian States would ensure a high degree of security. Establishing a compulsory registration for all carbon rights would have the additional advantage of providing a record for all transactions. Another instrument to safeguard the transfer of carbon sequestration rights could be the provision of compulsory insurance clauses. With the establishment of "title insurers" in charge of researching the sellers' ownership rights, if the sellers' title proved flawed, the title insurer would guarantee the rights of the buyers.[42]

The second kind of risk facing buyers of carbon sequestration rights is that the carbon sequestered in the forest decreases, owing to circumstances beyond the control of the buyer or seller. These may be the result of natural events or of third parties' activities that have a negative impact on the carbon stored in forests. In addition, changes in the understanding of the quantity of carbon that forests may sequester, or in norms regulating the calculation of carbon, could also significantly affect the carbon sequestered in a forest. In these cases it is necessary to establish who bears the risk for variations in the estimate of sequestered carbon.[43]

The decision on who will bear the risk for variations in the sequestered carbon depends on the nature of the property right and of the transaction. In a country where the government owns all

42 Rosenbaum *et al*., *supra* note 34, p. 40.
43 *Ibid*.

carbon sequestration potential and there are no transactions, the State will naturally bear all risks, as originally envisaged in New Zealand. In situations where carbon rights are freely traded on the market, contracts may specify who bears the risks, as with CSRs in Australian States. In this connection, contracts may include clauses addressing permanence, including general obligations such as controlling pests, maintaining firebreaks or other fire management systems. Even in contractual situations, however, legislation may set out the basic rules on risk assumption. For example, the law may determine who bears the risk when the contract is silent on the issue. This may be regulated according to general contract law.

Legislators may set up specific rules for REDD. Legislation may draw distinctions based on intent or culpability, detailing who bears the risk for loss of carbon due to acts of nature, negligence or intentional acts. The law may recognize degrees of negligence or may apportion responsibility where multiple causes contribute to the loss.[44] The Mexico Payment for Environmental Hydrological Services Programme, for instance, provides an example of specific consequences for non-compliance associated with different levels of culpability.

Box 1.8 The Payment for Environmental Hydrological Services Programme in Mexico

The Mexican Programme for the Payment for Environmental Hydrological Services provides economic incentives to reduce deforestation in areas suffering from water scarcity. The programme established a system of payments for services, such as the protection, management and restoration of watersheds, in areas where commercial forestry is not competitive. Payments take place through a trust fund financed by a fee charged to federal water users. To be eligible, forests need to have more than 80 percent density and to be located in overexploited aquifers, with nearby population centres of at least 5,000 inhabitants. Each forest owner cannot register more than 200 ha, in order to avoid the risk of monopolization of payments. Contracts provide a tree-harvesting ban in the forest surrounding the protected areas, to prevent intra-property leakage. In case of intentional land-use change, the forest owner receives no payment. If deforestation occurs for other reasons (e.g., forest fire or timber theft), then the owner is paid only for whatever part of the forest was preserved. Monitoring is carried out on the basis of satellite images. Between 2003 and 2005, satellite images showed that less than 0.01 percent of areas protected by the programme were deforested, in comparison with a national average deforestation rate of one percent per year. Forest fires and non-intentional land-use changes caused the majority of losses.

Source: Karousakis (2007).

Domestic law may provide general remedies to recover damages from losses in carbon stocks caused by third parties. Damages may be calculated on the basis of the monetary loss suffered by the owner. Legislators may also devise a specific regime for seeking damages related to losses in carbon sequestration.

44 *Ibid*., p. 42.

Calculating damages can be complicated, as the mere loss in commodity value may not reflect the total damage and, most notably, damage to the forest carbon stocks. Because of the rate at which trees grow, the amount of carbon stocked in a forest varies quite considerably over its life cycle. If, for example, the measure of carbon sequestration is set in five-year periods, and the forest suffers damage by fire at the end of the first cycle, the amount of sequestered carbon loss would be relatively small. However, the fire would reset the ecological succession clock to zero and, in the next five years, the forest would again sequester relatively little carbon. Thus, besides destroying the existing carbon gain, the fire would delay future gains.[45]

Calculating damage to forests' carbon sequestration capacity requires a good understanding of the rate at which trees grow on the site throughout their life cycle. Legislation may help solve these questions by setting standards for calculating damages. The calculation of damages may be based on the cost of restoring the carbon stock. Alternatively, legislation could provide a specific formula for calculating damages, based on the extent of the affected forest area, or the number of trees that have been damaged or lost. The provision of such a formula could simplify the proof of loss, particularly when there is no national market value for sequestered carbon.[46]

Another possibility is that legislation sets high compensation thresholds to deter forest damage, as well as to compensate affected forest owners. For example, forest owners may be able to claim damages equivalent to two or three times the value of lost trees. Similar multipliers could also be applied to the loss of carbon sequestration potential. Existing civil liability regimes and criminal offences may also be deployed. However, given courts' likely unfamiliarity with the evaluation of carbon sequestration losses, legislators may want to set specific guidelines in this connection.[47]

> ***Key message:*** Transferable rights over sequestered carbon may require the adoption of specific fraud prevention measures. The decision on who will bear the risk for variations in the sequestered carbon depends on the nature of the property right and of the transaction.

1.4 Competing interests

REDD objectives are likely to clash with other forest uses and to pose a series of challenges to existing legal frameworks. Existing land and forestry legislation may already provide mechanisms to solve conflicts between competing forest uses. However, legislation might need to be streamlined to solve conflicts engendered by REDD activities.

As a preliminary step, clarity over land rights and carbon ownership rights is critical to prevent disputes between competing stakeholders. Land selected for REDD projects may be subject to conflicting claims and rights. Legal interests over the forest that are likely to be relevant include land ownership; various land use arrangements; timber concessions; non-timber forest product (NTFP)

45 *Ibid*., p. 43.
46 *Ibid*.
47 *Ibid*., p. 44.

harvesting rights;[48] mining rights or mining exploration rights. These entitlements must be identified and conflicts resolved before a project can proceed.

As the case of Cameroon exemplifies, domestic law may protect customary users' rights to access and use forest resources, even when forests are exploited for commercial purposes. The quantification of carbon losses associated with these practices may make the monitoring and quantification of carbon sequestration rather complicated. It is therefore preferable to solve such use conflicts before activities start, both to ensure the successful establishment of REDD projects and compliance with the rights of existing forest users.

Due diligence may be conducted to ensure that the land is free from licences, leases, or concessions incompatible with REDD. Where such encumbrances exist, it is necessary to reach appropriate agreements with relevant right holders. Customary rights must be taken into account, even when they have not been formalized. In this regard, it is necessary to comply with the requirements set out by domestic and human rights law, especially in connection with indigenous peoples. REDD initiatives need to pay special attention to the rights of indigenous peoples.[49] In this connection, the UN REDD Programme has formally incorporated the *UN Declaration on the Rights of Indigenous Peoples* into its operational policy instruments.[50] The case of Indonesia exemplifies some of the issues that may arise with reference to these groups.

Box 1.9 Indigenous peoples and REDD in Indonesia

Indonesia has recently passed REDD legislation that raised criticisms for its treatment of indigenous peoples. Even before the recent reform, however, the United Nations Committee on the Elimination of Racial Discrimination had repeatedly urged Indonesia to review its laws "to ensure that they respect the rights of indigenous peoples to possess, develop, control and use their communal lands".[51] The controversy referred to Law 41 of 1999 on Forestry, which vested exclusive authority over forests in the Indonesian state, without making any special provision for the rights of indigenous peoples. The same law also empowered the state to issue

48 According to the FAO, a non-timber forest product is "a product of biological origin other than wood derived from forests, other wooded land and trees outside forests". FAO Forest Resources Assessment Programme. (2005). *Global Forest Resources Assessment update 2005. Terms and Definitions.* Rome, Italy: FAO.

49 UN Human Rights Council. (2009). "Report of the Office of the United Nations High Commissioner for Human Rights on the relationship between climate change and human rights", at para. 94. UN Doc. A/HRC/10/61, 15 January 2009. Geneva, Switzerland: UN Human Rights Council.

50 UN-REDD Programme. (2009). "Operational Guidance: Engagement of Indigenous Peoples and Other Forest Dependent Communities", p. 6: "All UN-REDD Programme activities, particularly those that may potentially impact Indigenous Peoples…, must follow a human rights based approach and must adhere to the *United Nations Declaration on the Rights of Indigenous Peoples*,…".

51 CERD. (2007). "Concluding observations of the Committee on the Elimination of Racial Discrimination: Indonesia", *at para.* 17. 15/08/2007. CERD/C/IDN/CO/3. Geneva, Switzerland: UNOG-OHCHR.

concessions over any forest land at its discretion.[52] This arrangement has reportedly had severe negative consequences for indigenous peoples.[53] In 2009, the United Nations Committee on the Elimination of Racial Discrimination found that recent legislation on REDD replicated provisions that were prejudicial to the exercise and enjoyment of the rights of indigenous peoples.[54] *Regulation on Reduction of Emissions from Deforestation and Forest Degradation Procedure*[55] reiterates that indigenous forests are "State forest".[56] The same provision is also made in *Regulation on the Implementation of Demonstration Activities on Reduction of Emissions from Deforestation and Degradation,* which was adopted in December 2008[57] These measures seemingly allow the state to create publicly and privately held forestry concessions and "carbon sinks" in forests traditionally owned by indigenous peoples, without taking into consideration their customary rights.[58] Indonesia seems to have dismissed the United Nations Committee on the Elimination of Racial Discrimination's concerns and has not amended the contested provisions. Because of this, REDD activities in Indonesia may therefore have a negative impact on the rights of indigenous peoples. Concerns are heightened by the fact that a substantial percentage of Indonesia's remaining forests are within indigenous peoples' traditional territories.[59]

At the regulatory level, potential conflicts with existing land uses may be prevented by clearly identifying areas of land eligible for REDD. Land selection should be transparent and accommodate existing land rights. Regulations over REDD should specify which governmental department is

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52 *Ibid.*, para. 17: "while noting that land, water and natural resources shall be controlled by the State party and exploited for the greatest benefit of the people under Indonesian law, [the Committee] recalls that such a principle must be exercised consistently with the rights of indigenous peoples".

53 Stavenhagen, R. (Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous people). (2007). "Oral Statement to the UN Permanent Forum on Indigenous Issues Sixth Session, 21 May 2007", at p. 3; Tauli-Corpuz, V. and Tamang, P. (2007). "Oil Palm and Other Commercial Tree Plantations, Mono-cropping: Impacts on Indigenous Peoples' Land Tenure and Resource Management Systems and Livelihoods". UN Permanent Forum on Indigenous Issues Working Paper, E/C.19/2007/CRP.6; World Bank. (2006). Sustaining economic growth, rural livelihoods and environmental benefits: strategic options for forest assistance in Indonesia, at p. 2. Washington DC, USA: World Bank; Human Rights Watch. (2003). Without remedy: Human rights abuse and Indonesia's pulp and paper industry. Human Rights Watch Report: Indonesia, Vol. 15, No. 1(C). New York, NY: USA: Human Rights Watch; Amnesty International. (2002). "Indonesia: Grave Human Rights Violations in Wasior, Papua". Amnesty International Report ASA 21/032/2002, 26 September 2002; and Ballard, C. (2001). Human Rights and the Mining Sector in Indonesia. London, UK: International Institute for Environment and Development.

54 Communication of the Committee adopted pursuant to the early warning and urgent action procedures, 13 March 2009, at p. 2. Available online at *http://www2.ohchr.org/english/bodies/cerd/docs/early_warning/Indonesia130309.pdf*.

55 Regulation on Reduction of Emissions from Deforestation and Forest Degradation Procedure, Minister of Forestry (No. 30/2009, P.30/Menhut-II/2009), 1 May 2009.

56 *Ibid.*, at Art. 1(4) and (5) (repeating the same definitions contained in Law 41, 1999 on Forestry, Article 1 (4) and (6)).

57 Regulation of the Ministry of Forestry (No. P. 68/Menhut-II/2008), 11 December 2008, Art. 1(3).

58 Stavenhagen, *supra* note 59, p. 2.

59 Harris, N.L. *et al.* (2008). "Identifying optimal areas for REDD intervention: East Kalimantan, Indonesia as a case study". Environmental Research Letters 3: 1–11.

competent and any consultation requirements, as discussed in more detail in the next chapter. In general, legislation should, where possible, identify criteria to establish priorities between competing land uses, and provide a mechanism to avoid conflicts, for example by requiring mutual agreements between existing forest users before a REDD project can take place, or to resolve disputes when competition arises.

In this context, simply giving priority to REDD may lead to conflicts and meet strong resistance on the ground. REDD projects are likely to intertwine with environmental protection and local livelihoods. Legislation could require REDD project developers to respect environmental standards and contribute to the conservation of biological diversity, as well as to respect traditional or indigenous forest uses. Domestic legislation may also require carrying out environmental and social impact assessments.

Where forest maintenance is to be ensured by buying out existing logging concessions, project developers need to closely review any obligations or conditions imposed by concessions, to ensure consistency with REDD objectives. Some concessions require their holders to undertake supporting activities that may be wholly inconsistent with carbon sequestration, such as, for example, the construction of roads. Before acquiring such concessions, REDD project developers must ensure that any such obligations be removed.[60]

Disruption and costs to local communities should be duly compensated. Additional offset measures may also be adopted, providing local benefits, such as employment, public access to the forest, or public use of project infrastructure. Even though domestic law does not require the adoption of any compensatory measures, adequate provisions should ensure long-term benefits and revenue streams to customary landholders.

Key message: REDD objectives are likely to clash with other forest uses and to challenge existing legal frameworks. Clarity over land and carbon ownership rights is a critical preliminary step to prevent disputes between competing forest stakeholders. Legislation should identify criteria to establish priorities between competing land uses, and provide a participatory mechanism to avoid conflicts.

1.5 Conclusions

Questions associated with land and forest rights are likely to pose major challenges to the implementation of REDD, because of the lack of secure arrangements in several potential host countries. Case studies included in this volume show how the issue of customary rights is still highly contentious, with the possible of exception of Guyana, which has a simple and clear land settlement process that gives land and forest ownership to Amerindian communities.

No potential host among the case study countries has yet defined the legal nature of carbon rights. Theoretically, contractual and existing statutory arrangements may be sufficient for the legal design and implementation of REDD activities. However, lack of clear rules over carbon ownership and emission reductions may engender uncertainty on how these rights can be securely established,

60 Baker & McKenzie. Covington & Burling LLP. (2009). "Background Analysis of REDD: Regulatory Frameworks", p. 22. Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Sydney, Australia: Baker & McKenzie.

maintained and transferred. These uncertainties are likely to lead to increased transaction costs e.g., from fees incurred to figure out the legal status of every project anew, especially in overlapping federal-state jurisdictions. It is therefore advisable that regulations be adopted to solve the specific questions raised by forest carbon ownership and associated liabilities. The answers to these questions will naturally vary from one jurisdiction to another, due to their implications on the laws of property, taxation, and natural resource use. In this connection, the experiences of Australia and New Zealand have set interesting precedents that may be a useful reference for the regulation of forest carbon rights in REDD projects.

Although secure land and forest ownership and use rights are an indispensable precondition to tackle deforestation, formal rights not supported by adequate enforcement and participative mechanisms may have no significant impact on deforestation. Moreover, the hypothesis that people benefit from the forest, and would conserve it if they controlled it, may not hold when alternative land uses provide higher benefits than forest conservation.[61] Without rectifying the present state of affairs, the implementation of REDD in most tropical forest countries is likely to replicate the flaws of existing legislative frameworks. In this context, REDD incentives have a crucial role to play, addressing the root causes of the inferior profitability of forest conservation.

New financial flows to forests, however, also carry significant social risks. Traditional users and customary owners may lose access to land upon which they depend for their livelihood and subsistence, as feared in connection with the implementation of recent regulations in Indonesia. The establishment of REDD projects may lead to abusive contracts with local people, as seen in Papua New Guinea. The inequitable distribution of benefits within local communities could also potentially lead to serious social conflicts.

REDD cannot solve the many governance and legality issues associated with deforestation in developing countries. It is however necessary to bear in mind the complexities of the drivers of deforestation and build upon lessons learnt through existing efforts to tackle the problem. Securing rights over forest resources represents a first preliminary step, which should be assisted by a host of other precautions, as the following chapters in this volume will illustrate.

61 Tacconi, *supra* note 17, p. 343.

2 Participation, Balancing of Rights and Interests, and Prior Informed Consent

Elisa Morgera*

As most REDD activities are likely to take place in three tropical regions of the planet – the Amazon Basin and Mesoamerica, the Congo Basin in central Africa, and South East Asia – millions of forest-dependent indigenous and local communities (or "communities") that inhabit large portions of tropical forests may be concerned with REDD. Awareness that REDD and communities are inevitably linked has been growing,[1] as has the understanding that this relation should be appropriately addressed in the legal architecture for REDD.

Besides communities, other key actors have rights and interests that should be taken into account in the regulation of REDD at the national level; first of all, landowners and outside (possibly foreign) investors. Many other actors may of course be involved to a lesser extent, such as farmers, cattle ranchers, miners, carbon brokers, environmental NGOs and universities. Overall, the larger the geographic area of a given REDD activity, the higher the number and diversity of stakeholders with which national, regional and local authorities will have to interact. A sound legal basis for participation in the regulation and development of REDD initiatives at the national level will be an essential precondition for a fair and effective balancing of different rights and interests.

This chapter will start by highlighting the importance of, and experience already accrued in, developing national legal provisions on public participation related to REDD. It will then identify the main legal issues related to three key groups of actors, namely: outside (and foreign) investors, landowners and communities. It will then concentrate on policy recommendations and legal options at two levels of participation: public participation in REDD decision making (including at the policy and law-making stage, as well as at the project design and implementation stages); and participatory approaches to the undertaking of REDD activities.

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1 *See* for instance, Peskett, L. *et al*. (2008). "Making REDD work for the Poor". A Poverty Environment Partnership (PEP) Report. IUCN; ODI; UNDP; SIDA; ADB; DFID; Ministère de l'Ecologie, de l'Energie, du Développement durable et de l'Aménagement du territoire; UNEP-WCMC; Lawlor, D. and Huberman, D. (2009). "Reduced Emissions from Deforestation and Forest Degradation (REDD) and human rights". In: Campese, J. *et al*. (Eds.) *Rights-based approaches: Exploring issues and opportunities for conservation*, pp. 269–286, at 278 (Box 2). Bogor, Indonesia: CIFOR; and IUCN.

2.1 National legal provisions on participation

Public participation is a key general principle of international environmental and sustainable development law, which has been enshrined in the 1992 Rio Declaration on Environment and Development with reference to three inter-related pillars: access to information, participation in decision making, and access to justice.[2] The principle has also been reflected in the 1992 Rio Forest Principles[3] and more recently in the Non-Legally Binding Instrument on All Types of Forests[4] with specific reference to indigenous and local communities and sustainable management of forest.

These international references, as well as the relevant provisions of the Convention on Biological Diversity (CBD) on sustainable use, traditional knowledge, the involvement of communities and the ecosystem approach have significantly influenced the development of national forest law leading to the inclusion of legal provisions on participation in forest-related decision making, and participatory approaches to the sustainable management of forest. Public participation has become an indispensable approach to obtain full information on the multiple values and needs associated with forests, to create a sense of ownership of forest policies and legislation among participating stakeholders, and ultimately to facilitate law enforcement.[5] The regulatory aims of participation also extend to increasing the accountability, legitimacy, and credibility of public authorities,[6] possibly reducing opportunities for corruption. A participatory process may also facilitate institutional cooperation, providing opportunities for different sectoral branches of government, as well as different geographical levels of government to exchange information and ideas before a decision is made. Participation may, in addition, contribute to building a climate of increased understanding and mutual trust among stakeholders that may lead to true collaboration and partnerships; as well as raising the awareness and building the capacity of different stakeholders in using the law, and contributing to the sustainable management of forest. Participatory processes may further help in effectively identifying the existing land uses in areas selected for REDD activities, and selecting ways in which conflicts may be prevented or resolved (facilitating the reaching of mutual agreement between existing forest users before a REDD project can take place, or establishing a priority among competing uses). Thus participation is a key approach to addressing the tenure-related issues that have been raised in the previous chapter. Overall, national legislation on participation may contribute both to good governance and to the empowerment of the poor in the forest sector.[7]

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2 Report of the UN Conference on Environment and Development: Annex 1. Rio Declaration on Environment and Development, UN Doc A/CONF.151/26 (Vol.I), 12 August 1992, Principle 10.

3 Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forest, UN Doc A/CONF.151/26 (Vol.III), 14 August 1992, para 2(d).

4 UN Doc A/RES/62/98, 31 January 2008, para. 2(c).

5 Christy, L. *et al*. (2007). *Forest Law and Sustainable Development: Addressing Contemporary Challenges through Legal Reform*, pp. 104–110. Washington DC, USA: World Bank.

6 Shelton, D. (2009). "A Rights-based Approach to Conservation". In: Greiber, T. (Ed.). *Conservation with Justice: A Rights-based Approach.* pp. 6-7. IUCN Environmental Policy and Law Paper No. 71. Gland, Switzerland: IUCN.

7 This is also the conclusion of Bond, I. *et al*. (2009). *Incentives to sustain forest ecosystem services: A review and lessons for REDD*, at 23. Natural Resources Issues 16. London, UK: IIED.

There is quite some experience in devising national legal provisions on participation in decision making in the forest sector that may be considered and adapted to the specific context of REDD.[8] Similarly, from a comparative analysis of national forest legislation, several legal options emerge to facilitate the direct participation of certain stakeholders, particularly local and indigenous communities, in the actual management of forests. Options include the allocation of control and management rights to communities (community-based management), sharing of control and management rights between public authorities and communities (co-management), leasing of forest land to communities, or the legal recognition of traditional management by indigenous communities.[9]

Key message: National legal provisions on participation in the forest sector should be created, or strengthened and adapted to ensure transparent and informed decision making, build partnerships, facilitate law enforcement, and prevent conflicts and corruption in relation to REDD.

Experience in devising national legislation on participation in the forest sector is and will continue to be quite a significant source of inspiration for REDD policy and law makers. International guidance on policy, legal and institutional issues related to REDD that is expected to be agreed upon in December 2009, will still leave considerable room for manoeuvre for national legal drafters. Guidance at the international level will necessarily remain at a level of generality that will allow national legal drafters to devise more detailed rules that fit best with pre-existing national legal frameworks on forests, land tenure and development, among others. A parallel can be usefully drawn on this point with the Bonn Guidelines on Access and Benefit Sharing (ABS)[10] that were agreed in the context of the CBD to guide parties in developing national regimes on ABS.

Box 2.1 Comparative lessons in guaranteeing participation and prior informed consent in the context of access and benefit sharing under the CBD

The Bonn Guidelines specifically state that competent national authorities are responsible, among other things, for putting in place "mechanisms for the effective participation of different stakeholders, as appropriate for the different steps in the process of access and benefit-sharing, in particular, indigenous and local communities […] promoting the objective of having decisions and processes available in a language understandable to relevant indigenous and local communities" (para. 14). CBD parties were further called upon to ensure that decisions are made available to relevant communities and relevant stakeholders and "support measures, as appropriate, to enhance indigenous and local communities' capacity to represent their interests fully at negotiations" (para. 16(a)). In addition, users were called upon to seek informed consent

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8 Christy *et al*., *supra* note 5, pp. 104–110.

9 *Ibid*., pp. 87–100.

10 Secretariat of the Convention on Biological Diversity (SCBD). (2002). *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization.* Montreal, Canada: SCBD. More background information on the Bonn Guidelines can be found in the next chapter.

prior to access to genetic resources; respect customs, traditions, values and customary practices of indigenous and local communities, [and] respond to requests for information from indigenous and local communities" (para. 16(b)).

A whole section of the Guidelines is further devoted to public participation, according to which "relevant stakeholders should be consulted and their views taken into consideration in each step of the process, including: when determining access, negotiating and implementing mutually agreed terms, and in the sharing of benefits; and in the development of a national strategy, policies or regimes on access and benefit-sharing" (para. 18). National consultative committees were considered "appropriate consultative arrangements" (para. 19). Stakeholder participation was expected to be promoted by: providing information, especially regarding scientific and legal advice; providing support for capacity-building; and making available upon request the support of a mediator or facilitator for stakeholders' negotiations (para. 20).

Since the adoption of the Guidelines, international negotiations have been started with a 2010 deadline to develop an international instrument on ABS; in the meantime, some developing countries have formulated laws on ABS that include a wide range of options for ensuring participation. In India, for instance, before granting investors access to genetic resources, a centralized authority is to consult with biodiversity management committees created at the local level for involving local communities in decision making. The same authority is also to notify the public of its approval of access to genetic resources (2002 *Biological Diversity Act*, sections 19(4) and 20(4)). In Brazil, a central decision-making body grants the consent, while other parties may also give consent, including indigenous communities when access occurs on indigenous land (Provisional Measure 2.186-16/2001, Article 16(9)).

In the Philippines, after having obtained authorization from the central regulatory body, the applicant has to seek the written, prior informed consent (PIC) of indigenous cultural communities if the proposed access is to occur in their ancestral lands. In other instances, applicants have to obtain the consent of local authorities and affected landowners. The central regulatory body has the responsibility to ensure that the rights of communities are protected (Executive Order 247 of 1995, sections 2 and 6). Interestingly the Philippines' legal instrument defines PIC as consent obtained "after disclosing fully the intent and scope of the bioprospecting activity in a language and process understandable to the community, and before any bioprospecting activity is undertaken" (section 2(1)(w)). In South Africa, the applicant has to negotiate directly with concerned communities, subject to ministerial approval. Those issuing permits may facilitate these negotiations to ensure that the parties are on an equal footing or may be required by the minister to ensure that the arrangement is fair and equitable (*Biodiversity Act*, sections 82(4)(b) and (4)(c)).

Sources: Secretariat of the Convention on Biological Diversity (2002); Roberts (2009).

2.2 Who may participate in REDD activities?

It is essential that participation at the national level ensures dialogue and knowledge sharing among the public sector, the private sector and civil society, so that comprehensive consideration of respective needs, capacities and expectations can contribute effectively to good governance.[11]

2.2.1 Foreign investors

In principle, investors, be they local or foreign – and in the latter case be they private entities or sovereign governments – should be able to participate in REDD activities at the national level. There are, however, three levels of potential legal constraints to their participation in REDD. First of all, they will have to abide by national legislation, which may already include requirements for consultation and collaboration with public authorities, landowners and communities. In Papua New Guinea (PNG), for instance, the consent of local landowners is required for any interest in land to be divested to a third party. So investors wanting to obtain a forest concession only have the opportunity after the Forest Authority has entered into a management agreement with relevant landowners.[12] As noted in the previous chapter, however, these legal provisions have not prevented abuses of landholders' rights.

Another interesting case that may be relevant for REDD is that of Brazil, where according to the federal forest law, forest concessions may not include the right to commercialize credits earned from avoided carbon emissions in natural forests. In practice, the federal government has reserved for itself the right to put carbon credits onto the market.[13] This provision, however, has been interpreted as allowing Brazilian States to place such credits onto the market,[14] thus allowing the creation of REDD projects such as the Juma one, which is presented as a case study in this volume.

Second, in the specific case of foreign investors, they will also be subject, prior to their establishment, to screening criteria and limitations enshrined in the national investment laws of the host country (as long as these requirements do not violate international – bilateral or regional – investment agreements into which the host country has entered). National authorities may justify restrictions to foreign investment in REDD on the basis of the consideration of forest carbon as a public good, for instance. In Indonesia, REDD-specific national legislation (Ministerial Decree No. P.68/Mrnhut-II/2008) requires that both a national and an international/foreign entity act as proponents of REDD projects. The national entity is expected to be a concession holder or an entity designated in the REDD regulation when the project site is not subject to an eligible concession. The international entity may be a foreign government, corporation, individual, international organization or charity that will be responsible for funding the project.[15] On the one hand, this requirement makes the participation of foreign entities

11 Robledo, C. *et al*. (2008). *Climate Change and Governance in the Forest Sector: An overview of the issues on forests and climate change with specific consideration of sector governance, tenure, and access for local stakeholders*, p. 49. Washington DC, USA: Rights and Resources Initiative.

12 Baker & McKenzie, Covington & Burling LLP. (2009). "Background Analysis of REDD: Regulatory Frameworks", p. 17. Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Sydney, Australia: Baker & McKenzie.

13 *Ibid*., pp. 19 and 25.

14 *Ibid*., p. 53.

15 *Ibid*., pp. 12 and 68.

in REDD activities obligatory, and on the other hand, it obliges foreign actors to partner with local entities.

Third, foreign and local investors may be constrained through contracts, which may include clauses aimed at balancing the specific rights and interests of concerned communities, landowners and any other relevant stakeholders.

Investors in turn will expect from host countries' governments a clear and predictable legal framework to provide security for investment. They will thus expect certainty as to procedures, documentation and standards for REDD activity approval, appropriate duration of concessions/licences to recoup initial costs and make a profit, and the possibility to renew concessions/licences upon satisfactory performance – which is also a mechanism to ensure investors' long-term accountability.[16] The fact that project implementation mechanisms are unclear – as in the case of Indonesia, where REDD-specific legislation is in place[17] – can be a great barrier to investors' participation in REDD activities. Overall, national legislators will need to think of ways to provide access to new business opportunities, share responsibilities and share benefits with investors.[18]

Key message: National legal provisions on the participation of outside investors in REDD activities need to be clear as to applicable restrictions, in particular to guarantee respect of the rights and interests of other stakeholders such as landowners and communities, while also providing predictable procedures and secure rights to investors.

2.2.2 Local landowners

Local landowners may serve as private land stewards that should be compensated for their activities to reduce emissions from deforestation and forest degradation on their land.[19] The role of local landowners in REDD will depend on the decision of national governments as to whether land ownership includes forest carbon ownership or not, as discussed in the previous chapter. In a broad approximation, legislation will need to clarify whether project developers will be required to obtain the consent of concerned landowners (as in the case of forest concessions in PNG mentioned above) or whether landowners should also be active participants in REDD activities.[20] In this respect, it is interesting to note how Mexico's 2003 *General Law for Sustainable Forest Development* attempts to provide a specific legal basis for rewarding forest owners for their environmental stewardship: the law provides that in the framework of international treaties and applicable national legislation, the relevant ministry must promote the development of a market for environmental goods and services that compensates owners and possessors of forest resources for the benefits given to other sectors of society (Art. 133).

16 *Ibid*., p. 42.
17 *Ibid*., p. 62.
18 Robledo *et al*., *supra* note 11, pp. 35–36.
19 Johns, T. *et al*. (2008). "A three-fund approach to incorporating government, public and private forest stewards into a REDD funding mechanism". *International Forestry Review* 10(3): 458–464, at 462.
20 Baker & McKenzie, *supra* note 12, p. iii.

Several legal issues may complicate matters when including landowners in REDD activities. As mentioned in the previous chapter, the situation of land tenure is not always crystal clear in developing countries. On the one hand, REDD may provide a stimulus for improving land titling in a given country, but it may also be expected that arrangements may have to be put in place for REDD activities to take place notwithstanding a lack of clarity over land rights that may not be resolved in the near future. When these situations specifically involve the lack of demarcation of indigenous lands, REDD activities should not affect the existence, value, use or enjoyment of properties located in indigenous lands.[21] Another issue may be that of land tenure fragmentation: in this case, national legislation may support collective contracting with smallholders to reduce individual transaction costs and possibly augment landowners' bargaining power.[22]

One last point to bear in mind with regards to landholders is the need to manage their expectations regarding the benefits of REDD, in the face of potential delays before credits or funds are issued.[23] Capacity building, timely communication and training for land-holders may need to be part of the obligations of public authorities and investors to this end.

Key message: National legislation will need to clarify whether REDD project proponents will be required to obtain the consent of concerned landowners or whether landowners should also be active participants in REDD activities. Specific attention should be paid in this regard to situations of unclear or fragmented land tenure.

2.2.3 Forest-dependent indigenous and local communities

Local and indigenous communities have inhabited and managed tropical forests for thousands of years, and large areas are still maintained by them.[24] Literature indicates that most deforestation and forest degradation is driven by factors exogenous to communities.[25] Consequently, forest-dependent communities are affected by deforestation and by some of the impacts of climate change, such as "increased fires in tropical rainforests and reductions in rainfall in temperate ecosystems, […] intensified threats to water and food security, increased coastal erosion and forced evictions of communities from their traditional territories".[26]

A Global Indigenous Peoples Consultation on REDD held in late 2008 highlighted a series of communities-specific challenges for the participatory development of REDD activities at the national level. These include a series of shortcomings on the part of national governments, such as: the lack of recognition of indigenous identity, traditional knowledge, traditional structures for decision making and the right to prior informed consent (PIC); the lack of representation of indigenous issues

21 *See* Shelton, *supra* note 6, based on *Awas Tingni Mayagna (Sumo) Indigenous Community vs. Nicaragua*, Inter-American Court of Human Rights, judgment of 31 August 2001.

22 Bond *et al*., *supra* note 7, p. 13.

23 Baker & McKenzie, *supra* note 12, p. 30.

24 Anaya, S.J. and Crider, S.T. (1996). "Indigenous Peoples, the Environment and Commercial Forestry in Developing Countries: The Case of Awas Tingni, Nicaragua". *Human Rights Quarterly* 18(2): 345–368, at 345.

25 *See* for example, Kanninen, M. *et al*. (2007). *Do trees grow on money? The implications of deforestation research for policies to promote REDD.* Bogor, Indonesia: CIFOR.

26 Nilsson, C. (2008). "Climate Change from an Indigenous Perspective". *Indigenous Affairs* 1–2: 8–15, at 12.

in REDD discussions and in environmental impact assessments; the lack of culturally appropriate decision-making processes; and the lack of recognition of women and young people's specific vulnerabilities and potential contribution to REDD.[27] In addition, new challenges may be created by REDD activities, such as: loss of access to forests as a result of exclusion from REDD activities or even displacement from traditional territories; exploitative carbon contracts under which communities assume disproportionate obligations or agree to unfair benefits; high transaction costs and lack of information; and elite capture of REDD benefits.[28]

Problems related to communities' land tenure were already discussed in the previous chapter. The legal requirement to obtain the consent of local landowners before issuing logging concessions in PNG provides a good example in this respect. The requirement was conceived with a view to legally protecting customary landowners who make up more than 97 percent of landowners in PNG.[29] Legal tools should therefore be devised not only to recognize land ownership for communities, but also other rights or interests linked with their role as "public forest stewards" and holders of relevant traditional knowledge, which should be rewarded through participation in REDD activities.[30]

With specific regard to indigenous peoples, the International Labour Organization Convention No. 169 (Indigenous and Tribal Peoples Convention)[31] and the UN Declaration on the Rights of Indigenous Peoples[32] can be considered as the international legal framework of reference. It should be noted that while the ILO Convention is a legally binding instrument, which contains international legal obligations for States that are parties to it, the UN Declaration is not binding but is drafted in more forceful language.[33] Other human rights instruments can also be considered relevant in the context of REDD: forest-dependent communities that are not recognized or self-defined as "indigenous" have rights that have been recognized by other international instruments.[34] The following box summarizes some of the provisions of indigenous and other forest-dependent communities' internationally recognized rights that may be relevant in the context of REDD.

27 UN-REDD Programme. (2008). "Summary report of the Global Indigenous Peoples Consultation on Reducing Emissions from Deforestation and Forest Degradation", pp. 16–17. Baguio City, Philippines, 12–14 November 2008.

28 Lawlor and Huberman, *supra* note 1, p. 272.

29 Baker & McKenzie, *supra* note 12, at 17.

30 Johns *et al*., *supra* note 19, p. 462.

31 ILO Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries, Geneva, 27 June 1989.

32 UN Doc. A/RES/61/295, 13 September 2007. It should be noted that certain countries voted against the adoption of the UN Declaration.

33 *See* discussion in Lawlor and Huberman, *supra* note 1, pp. 276–7.

34 *Ibid*., p. 279.

Box 2.2 Relevant provisions of international legal instruments on indigenous peoples' and forest-dependent communities' rights

According to the **ILO Convention No. 169,** national governments must:

- consult indigenous peoples, through appropriate procedures and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures which may affect them directly, such as those on their traditional lands (Art. 6(1)(a));
- establish means by which these peoples can freely participate, to at least the same extent as other sectors of the population, at all levels of decision-making in bodies responsible for policies and programmes (Art. 6(1)(b));
- to this end, ensure that consultations be undertaken in good faith and in a form appropriate to the circumstances, with the objective of achieving agreement or consent to the proposed measures (Art. 6 (2));
- design projects for the development of the areas indigenous peoples inhabit, so as to promote improvements of their conditions of life and work and levels of health and education, with their participation and co-operation (Art. 7(2));
- ensure that, whenever appropriate, studies are carried out, in co-operation with the peoples concerned, to assess the social, spiritual, cultural and environmental impact on these peoples of planned activities. The results of these studies shall be considered as fundamental criteria for the implementation of such activities (Art. 7(3));
- obtain indigenous peoples' free and informed consent if their relocation from the land they occupy is considered necessary, and provide full compensation for any resulting loss or injury (Art. 16).

According to the **UN Declaration on the Rights of Indigenous Peoples**, national governments should:

- obtain the free, prior informed consent of indigenous peoples concerned and agreement on just and fair compensation before forcibly removing them from their lands, possibly providing the option of return (Art. 10);
- respect the right of indigenous peoples' participation in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decision-making institutions (Art. 18);
- consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them (Art. 19).

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According to the **UN Declaration on the Right to Development**,[35] national governments should respect the right to development (Art. 2), which may imply the participation of forest-dependent communities in land-use zoning and decision making on the management of forest carbon revenues.[36]

According to the **International Covenant on Economic, Social and Cultural Rights**[37] and the **International Covenant on Civil and Political Rights:**[38]

- the right to means of subsistence may imply that forest-dependent communities should not be denied access to food, medicine and fuel wood in forests in the context of REDD activities;[39]
- the right to culture and religion implies that acceptability of measures that affect or interfere with the culturally significant economic activities of a minority depends on the opportunity to participate in the decision-making process and on whether a minority will continue to benefit from its traditional economy.[40]

Sources: Lawlor and Huberman (2009); Shelton (2009).

As already highlighted in the previous chapter, the UN REDD Programme has formally incorporated the UN Declaration on the Rights of Indigenous Peoples into its operational policy instruments. Specifically, Principle 2 of the "UN-REDD Programme on the Rights of Indigenous Peoples and Other Forest Dependent Communities" has recognized the relevance of PIC and the need to ensure "the full and effective participation of Indigenous Peoples and other forest dependent communities in policy-making and decision-taking processes within UN-REDD Programme activities".[41]

In turn, the World Bank's (WB) Forest Carbon Partnership Facility is subject to the Bank's Operational Guidelines (OP), including OP 4.10 on Indigenous Peoples. Although these guidelines do not go as far as requiring PIC, they require "prior, informed *consultation*" (emphasis added) as a fundamental step in the planning and implementation of projects financed by the WB that may affect indigenous peoples:

> *To ensure such consultation, the borrower:*
> *a) Establishes an appropriate gender and intergenerationally inclusive framework that provides opportunities for consultation at each stage of project preparation and implementation among the borrower, the affected Indigenous Peoples' communities, the Indigenous Peoples*

35 UN Doc. A/RES/41/128, 4 December 1986.
36 Lawlor and Huberman, *supra* note 1, pp. 280–1.
37 General Assembly Resolution 2200A (XXI), 16 December 1966.
38 *Ibid*.
39 Lawlor and Huberman, *supra* note 1, p. 281.
40 Shelton, *supra* note 6, based on *Apirana Mahuika et al. vs. New Zealand* (Communication No. 547/1992, *Apirana Mahuika et al. vs. New Zealand*, CCPR/C/70/D/547/1993, views issued on 16 November 2000).
41 UN-REDD Programme. (2009). "Operational Guidance: Engagement of Indigenous Peoples and Other Forest Dependent Communities". Working Document – 25 June 2009.

Organizations (IPOs) if any, and other local civil society organizations (CSOs) identified by the affected Indigenous Peoples' communities;

b) Uses consultation methods appropriate to the social and cultural values of the affected Indigenous Peoples' communities and their local conditions […]; and

c) Provides the affected Indigenous Peoples' communities with all relevant information about the project […] in a culturally appropriate manner at each stage of project preparation and implementation.[42]

In this context, the Seventh Session of the UN Permanent Forum on Indigenous Issues held in 2008 produced a set of recommendations to adapt these standards to the specific context of the Forest Carbon Partnership Facility, further clarifying that:

- Displacement and exclusion of indigenous peoples from their forests, which may be triggered by projects funded by the Partnership Facility, should be avoided at all costs.
- Indigenous communities' choice not to participate in REDD or in the projects supported by the Partnership Facility should be respected.[43]

Key message: National legislation should support the recognition of the internationally protected rights of local and indigenous communities as "public forest stewards" and holders of relevant traditional knowledge, and reward them through participation in REDD activities. To this end, national legislation should put in place specific procedures for culturally appropriate participation (consultation, prior informed consent) and benefit sharing.

Requiring PIC rather than consultations may be a matter of contention. The Inter-American Court of Human Rights has on two occasions addressed the question. Prior informed consultations were considered necessary when the issuance of natural resource concessions to third parties in respect of the ancestral territory of indigenous people might affect the existence, value, use, or enjoyment of their rights. When the natural resources concerned were directly linked to communities' subsistence activities, the Court held that no activities affecting communities could occur without their prior informed consent.[44] This interpretation may entail that when proposed REDD activities may undermine communities' subsistence practices, PIC, rather than mere consultations, should be required by national law.

42 OP 4.10. "Indigenous Peoples – Social Assessment: Consultation and Participation," (July 2005) Operational Manual, The World Bank, par. 10.

43 UN Doc. E/2008/43. E/C.19/2008/13. "United Nations Permanent Forum on Indigenous Issues: Report on the seventh session (21 April–2 May 2008)". Official Records Supplement No. 23 at 7.

44 Shelton, *supra* note 6, based on a combined interpretation of *Awas Tingni Mayagna (Sumo) Indigenous Community vs. Nicaragua*, Inter-American Court of Human Rights, judgment of 31 August 2001 and *Saramaka People vs. Suriname*, Inter-American Court of Human Rights, judgment of 28 November 2007.

Box 2.3 What does PIC entail?

PIC is a procedural mechanism to avoid potential conflict and reduce the risks of environmental or social harm of certain activities, which should be undertaken prior to the commencement of proposed activities.[45]

It should be noted that whereas in the context of the CBD, the expression "prior informed for consent" is used,[46] in human rights instruments the expression "free prior informed consent" is preferred.[47] This chapter refers to PIC with the understanding that in strictly legal terms, for consent to be considered as such, it needs to be freely given.[48]

In the framework of PIC, all actors proposing programmes, projects or activities impacting on indigenous lands or resources should ensure that:

- there is no coercion, intimidation, fraud, or manipulation;
- consent is sought sufficiently in advance to allow for traditional indigenous consultation and consensus processes to take place;
- information is provided that reveals the nature, size, pace, reversibility, and scope of any proposed project or activity; the reasons for it being proposed; its duration and the range of the affected area; a preliminary assessment of the likely economic, social, cultural and environmental impact, including potential risks, and fair and equitable benefit sharing in a context that respects the precautionary principle;
- information is provided in a form that is accessible and understandable, including in a language that the people will fully understand;
- indigenous peoples are allowed to specify which representative institutions or individuals are entitled to express consent on behalf of the affected peoples or communities, consistent with the right of non-discrimination;
- consultations are undertaken in good faith, establishing a dialogue of mutual respect and full and equitable participation.[49]

*Sour*ce: Shelton (2009).

National legal provisions on participation in the regulation and development of REDD activities would be an essential precondition to ensure that prior informed consent, or at least prior informed consultations, occur not just as a matter of good-will administrative practice, but rather as a legal

45 *Ibid*.

46 CBD Decision V/16, Annex on work programme on the implementation of Article 8(j), general principle 5 reads as follows: "Access to traditional knowledge, innovations and practices of indigenous and local communities should be subject to prior informed consent or prior informed approval from the holders of such knowledge, innovations and practices."

47 *See* text box 2.2 above.

48 *See* for instance, A. Perrault *et al.*, "Partnerships for Success in Protected Areas: The Public Interest and Local Community Rights to Prior Informed Consent (PIC)", 19 *Geo. Int'l Envtl. L. Rev*. 2006-2007, 476-542.

49 Shelton, *supra* note 6.

obligation binding both the administration and REDD activity proponents. Such legal provisions may also create opportunities for communities to provide valuable input to the design of the REDD activity. Their participation could extend not only to approving or opposing a given activity, but also to mapping, contributing with ground verification of remote forest cover monitoring and making proposals for the design of benefit-sharing mechanisms.

Communities' rights to participation and PIC may already be codified in national legislation relevant to REDD. For instance, according to Colombia's 2006 *General Forest Law*, use of the forest resources within the territories of Afro-Colombian and indigenous communities must be considered their exclusive right and "in any case undergo the procedure of prior consultation with the communities involved" (Article 19). Difficulties in ensuring that these rights are respected at the national level have however already been reported, as illustrated in the case of logging and mining concessions in Suriname, described in Box 2.4.

Box 2.4 Communities' participation in forest management in Suriname

Suriname was censured in 2007 by the Inter-American Court of Human Rights (*Saramaka People vs. Suriname* decision)[50] for having restricted the use of natural resources on customary land of the Saramaka people. The government was found at fault for having granted logging and mining concessions without having undertaken a series of procedural steps, namely:

- ensuring the effective participation of the members of the Saramaka people, in conformity with their customs and traditions, regarding any development, investment, exploration or extraction plan within Saramaka territory;
- guaranteeing that the Saramakas will receive a reasonable benefit from any such plan within their territory;
- ensuring that no concession will be issued within Saramaka territory unless and until independent and technically capable entities, under State supervision, perform a prior environmental and social impact assessment;
- for large-scale development or investment projects that would have a major impact within Saramaka territory, obtaining the free, prior, and informed consent of the people, according to their customs and traditions.[51]

Probably as a lesson learnt from this decision, Suriname's government adopted a REDD policy through a broad participatory process involving NGOs, indigenous peoples and Maroon organizations. The main conclusions of the Suriname REDD+ consultations held in July–August 2009 include:

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50 Judgment of the Inter-American Court of Human Rights in the case of *Saramaka People vs. Suriname*, 28 November 2007.

51 *Ibid*. at para. 129; Lawlor and Huberman, *supra* note 1, p. 280; Shelton, *supra* note 6.

- *More awareness is needed about the REDD+ readiness strategy;*
- *The dissemination of information is important. Who provides the information is also important;*
- *Much time is needed for consultation meetings in order to ensure a good understanding of the REDD+ readiness strategy;*
- *Sufficient time must be planned for internal consultations within the Indigenous and Maroon villages;*
- *Any effective and efficient consultation model must be based on the principle of free PIC;*
- *The national and local languages must be used during consultations and in education and awareness programs to ensure a full understanding;*
- *All information must be sent to the organizations and representatives of traditional authorities in hard copies in a language that they can understand;*
- *The land rights of Indigenous and Maroon communities must be taken into account.*[52]

Sources: Lawlor and Huberman (2009); Republic of Suriname (2009); Shelton (2009).

Overall, national legislation will have to identify the responsibility of national and local authorities *vis-à-vis* the rights of forest-dependent communities in relation to REDD. This may include the obligation for authorities to engage in consultation prior to the approval of any project-level activity, the obligation to obtain prior informed consent and to respect refusal, the obligation to allocate a predetermined share in the economic benefits of REDD to communities, and the obligation to follow specific procedures in all these instances. In addition, national legislation could create an obligation for outside investors to collaborate with local and indigenous communities, and establish strict conditions limiting the cases in which REDD activities may involve relocation or displacement of communities. Legislation should finally provide for a procedure to establish whether participants in REDD activities have satisfied applicable requirements with respect to forest-dependent communities.[53]

Key message: National legislation should clearly assign responsibilities and establish detailed procedures both for authorities and investors to ensure consultation with, or prior informed consent from, forest-dependent communities.

52 Republic of Suriname. (2009). "The Forest Carbon Partnership Facility (FCPF) Readiness Preparation Proposal (R-PP)", p. 16.

53 Baker & McKenzie, *supra* note 12, p. iii.

2.3 Participation in decision making related to REDD

2.3.1 Access to information

Access to information is a prerequisite for effective public participation in decision making. The FCPF "Readiness Mechanism for National Consultation and Participation for REDD" has explicitly recognized its relevance for REDD.[54] National legislation should therefore ensure that responsibilities for providing information to concerned stakeholders are clearly allocated. These responsibilities can be placed on public authorities, at the national and local level, as well as on private operators (investors and brokers).

REDD-related information should certainly include how REDD works, its potential for benefiting communities, options for benefit-sharing mechanisms, and identification of potential outside investors,[55] as well as information on environmental and social impact assessments of proposed REDD activities.[56] All information on the financial cycles of REDD projects, and fundamental operational and methodological information on any particular REDD project should also be accessible. Finally, information to be shared should include REDD-related legal rights and the modalities of exercising them.[57]

National legislation should specify the rights, duties and procedures for accessing REDD-related information, as general clauses are often more difficult to apply because they leave excessive discretion to public authorities and other stakeholders (such as REDD project proponents) that are called upon to share information. On the one hand, the law can create obligations to ensure the publication of certain types of REDD-related information, irrespective of whether this is requested by the public. In this case, the law needs to specify: what kind of information should be made available; in what forms and in what timeframes information should be made public; and which public authority or other actor is responsible for informing the public.[58]

With specific regard to indigenous and local communities, efforts should be made to provide information in the different languages and dialects spoken in the national territory. In addition, it should be ensured that information is also made available in remote areas, possibly with the collaboration of local authorities. In areas of high illiteracy rates, non-print media such as the radio should be used.[59] When working with communities, special attention should be paid to the fact that they may have power and gender structures of their own, and every possible effort should be made to support gender equity without being disruptive. Project or activity proponents should take the initiative in disseminating information to potentially affected persons about their legal rights and the modalities of exercising them.

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54 Forest Carbon Partnership Facility (FCPF). (2009). "Readiness Mechanism: National Consultation and Participation for REDD". Washington DC, USA: World Bank.

55 Bond *et al*., *supra* note 7, p. 25.

56 UN-REDD Programme, *supra* note 27, p. 7.

57 Shelton, *supra* note 6.

58 Christy *et al*., *supra* note 5, pp. 101–104; Morgera, E. and Wingard, J. (2008). "Principles for Developing Sustainable Wildlife Management Laws", pp. 17–18. FAO Papers Online #75. Rome, Italy: FAO.

59 Shelton, *supra* note 6.

In Suriname, for instance, institutional reform has included the creation of a specific Department for Consultations and Outreach in the newly formed National Forest Carbon Unit, which is tasked with disseminating information on REDDs to the general public and specific target groups.[60]

On the other hand, national legislation should establish a public right to access REDD-related information: this requires a mechanism by which concerned individuals can obtain upon request information in an easy, adequate and timely fashion. The law, therefore, should spell out how information should be requested (from which public authority information can be obtained or where the information is deposited), along with maximum timelines for obtaining the information requested; set penalties for improperly withholding information; and create judicial mechanisms for challenging denial of requests.[61]

> ***Key message:*** National legislation should identify the type of REDD-related information that should be freely accessible, and clearly establish relevant responsibilities and rights, and procedures to guarantee such access.

2.3.2 Participation in REDD decision making

The FCPF "Readiness Mechanism for National Consultation and Participation for REDD" has explicitly included among key principles for effective consultations the need to facilitate meaningful participation at all levels, and to link consultation processes to planning and decision making.[62] To implement these principles at the national level, legislation will need to indicate when and how participation should occur.

To this end, decision makers should also be aware of the difficulties of ensuring effective participation. It may be difficult to identify and involve true representatives for communities, particularly when there is disagreement within the community. Difficulties may also arise when the customs of relevant communities are incompatible with certain international human rights standards or constitutional guarantees (for example, because communities allow certain forms of discrimination within a community). Consultations may also result in time-consuming processes that may undermine the planning by REDD project proponents.[63]

2.3.2.1 When should participation occur?

National legal provisions should identify exactly the levels in the various REDD-related decision-making processes at which public participation should be ensured. At the programming stage, participation should be ensured in the preparation of REDD policies and legislation. This is the stage at which key decisions are taken as to the identification of competing interests (including the rights and interests of communities) and the establishment of hierarchies among them, the identification

60 Republic of Suriname, *supra* note 49, p. 12.

61 These provisions are inspired by the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), Aarhus, 25 June 1998, Article 4.

62 Forest Carbon Partnership Facility (FCPF), *supra* note 51.

63 Shelton, *supra* note 6.

of legislative restrictions on conducting REDD activities and the identification of eligible participants, and the features of the process for project approval.[64]

It has been reported, for instance, that in PNG stakeholder consultations were held on the government's draft REDD policy and were planned also for draft legislation.[65] In Guyana, consultations were held on the Readiness Idea Plan Note and Readiness Plan with a variety of stakeholders, including Amerindian communities and the forestry sector. While these *ad hoc* initiatives are laudable, it is essential that they be based on legal provisions that would enable stakeholders to legally enforce their rights to participation if these are not respected.

At the pre-project approval level, participation should be ensured at the stage of the selection of REDD activities and the determination of their conditions on a case-by case basis. Furthermore, participation should be ensured at the level of environmental and social impact assessments of proposed REDD activities[66] – the importance of which was already highlighted in the previous chapter. This may already be possible thanks to flexible provision in national environmental impact assessment legislation, as highlighted in the case study on Cameroon.

However, specific provisions may have to be designed to take into account the biodiversity-related and communities-related issues in the context of REDD. In the framework of the CBD, specific guidelines have been developed to address these issues, namely the voluntary guidelines on biodiversity-inclusive impact assessment[67] and the Akwé: Kon voluntary guidelines for the conduct of cultural, environmental and social impact assessment regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities.[68] These instruments can provide useful inspiration to national legal drafters. Overall, national legal provisions on REDD-related impact assessment should ensure that the assessment process should be conducted in an equitable, non-discriminatory and participatory manner, and should result in changes to proposed activities if necessary to avoid or mitigate adverse impacts on the environment or on communities.[69]

It will then be indispensable to create transparent and accountable procedures for granting REDD concessions, licences or contracts, and for preventing or resolving conflicts.[70] National legislation should also specifically guarantee participation at the stage of determining benefit-sharing arrangements (which are to be discussed in detail in the next chapter), in particular to ensure that communities' contributions are taken into account. Ultimately, decisions will need to be reasoned and disseminated to all relevant stakeholders.[71]

At the post-project approval level, participation should be ensured before the renewal or suspension/ revocation of concessions or authorizations related to REDD activities; when addressing changed circumstances during REDD project implementation; and in monitoring the performance of project

64 Baker & McKenzie, *supra* note 12, pp. ii–iv (Table 1: Elements of a Legal Framework for REDD).
65 *Ibid*., p. 16.
66 UN-REDD Programme, *supra* note 27, p. 7.
67 CBD Decision VIII/28, Annex, available at www.cbd.int/decision/cop/?id=11042.
68 CBD Decision VII/16, part F, available online: www.cbd.int/decision/cop/?id=7753.
69 Shelton, *supra* note 6.
70 Background Analysis of REDD Regulatory Frameworks, at 40.
71 Shelton, *supra* note 6.

implementers and their compliance with relevant requirements. During the implementation of REDD activities, stakeholders should have opportunities to signal unexpected impacts, whether social or environmental, taking place as direct consequences of the REDD activity.

Finally, participation should be ensured at the stage of monitoring REDD activities.[72] In this respect, it will be necessary to ensure that monitoring is also transparent and participatory. It should be based on pre-determined benchmarks and indicators to assess whether outcomes contribute to pre-defined objectives. It will also be necessary to impose a legal duty to report and disseminate the result of monitoring and post-project analysis.[73]

Key messages: National legislation should identify exactly the levels of decision making at which participation will be guaranteed, including REDD policy and law making, programming, project selection, impact assessment, concession granting, project implementation review and monitoring. National provisions on impact assessments should be reviewed to ensure that biodiversity- and community-related issues specific to REDD can be fully taken into account.

2.3.2.2 How should participation occur?

National laws should provide specific mechanisms for public participation in REDD-related decision making, both at the central and local levels. As the Eliasch Review noted, "national-level policy and legislative reform can take place relatively easily in capitals, but implementation and enforcement will require linkage deep into the forests. Truly participatory processes that bring forest communities into decision making also require mechanisms that can reach down to the community and individual level."[74]

Several options can be taken into account in this regard in developing national legislation. One is mandating regular admittance of the public to REDD-related meetings: the law should then ensure that meetings are held close to the area affected by the proposed REDD activity, to reach out to local stakeholders. Another option is legally mandated consultations: the law may establish a duty for public authorities to use a public notice and comment period prior to the adoption of a REDD-related decision. This will entail: the publication of proposed rules or decisions close to the site concerned by the expected decision; publication of information on the process for receiving and reviewing comments at a reasonably early time; the obligation for public authorities to take into account the comments received; and the obligation for public authorities to provide reasons in writing about the decision made, to allow public scrutiny over how comments have been taken into account.[75]

One practical example at the national level can be identified in the creation of the above-mentioned Department for Consultations and Outreach in Suriname, which is also tasked with working closely

72 UN-REDD Programme, *supra* note 27, p. 18.

73 Shelton, *supra* note 6.

74 Eliasch, J. (2008). *Climate Change: Financing Global Forests. The Eliasch Review*, p. 201. London, UK: Office of Climate Change.

75 Christy *et al*., *supra* note 5, pp. 104–110; Morgera and Wingard, *supra* note 60, pp. 18–19.

with other departments of the Forest Carbon Unit to conduct consultations and share learning materials to build capacity in decision making and facilitate community training.[76]

A third option is the establishment of a permanent multi-stakeholder body: the law may create an *ad hoc* body to allow ongoing public participation in REDD-related decision making as well as monitoring implementation of decisions. One such body could be simply advisory; or it could rather be a managing or decision-making entity. In any of these cases, the law should provide guidance as to its powers, placement in the government structure and composition, possibly ensuring balance between governmental and non-governmental representatives. The law should further ensure representation of local and indigenous communities, and transparent and bottom-up procedures for their selection. In the case of advisory bodies, the law should at least establish the obligation for the authority to consider and respond to the advice of this multi-stakeholder body.

The suggestion to create a national multi-stakeholder REDD working group has already been put forward.[77] While this solution may help to raise awareness about REDD at the national level, one should also consider that in many countries multi-stakeholder forest committees may already exist and could possibly serve REDD-related purposes, thus saving the costs of creating a brand-new institution. Overall, multi-sectoral bodies may also facilitate the integration of REDD and forest policy into larger development and poverty-reduction policies, if representatives of relevant sectoral branches of the government are also represented in these participatory mechanisms.

National legislation could finally establish some overarching principles so that consultations include the legitimate indigenous authorities and ensure broad representation of indigenous peoples including women[78] and young people, with due account of customary laws, norms and practices, as well as consideration of the rights of other forest-dependent communities.[79]

> ***Key message:*** National legislation should establish detailed procedures to ensure public participation in REDD decision making, both at the central and local level, putting guarantees in place to ensure genuine representation of the interests of forest-dependent communities. Public authorities and REDD project proponents should be specifically obligated to give due consideration to the outcomes of these consultations.

2.3.3 Access to justice

Access to justice increases the accountability of authorities and project proponents, and protects the rights of affected stakeholders, including public participation rights, providing an opportunity to challenge acts and omissions by public authorities and project developers, adverse decisions and denial of access to information. The FCPF "Readiness Mechanism for National Consultation and

76 Republic of Suriname, *supra* note 53, p. 12.
77 Bond *et al*., supra note 7, p. 23; and also UN-REDD Programme, *supra* note 27, p. 6.
78 For specific suggestions on how to ensure gender balance in decision making related to natural resources, *see* Cotula, L. (2002). "Gender". In: FAO. *Law and Sustainable Development since Rio*, pp. 245–246. FAO Legislative Study 73. Rome, Italy: FAO.
79 UN-REDD Programme, *supra* note 27, pp. 6–7.

Participation for REDD" has explicitly included among key principles for effective consultations the need to "establish mechanisms for grievance, during the consultation process, and throughout the implementation of REDD policies and measures". [80]

Usually, laws simply refer to the general means for dispute resolution, but more specific provisions may be needed to ensure a fair and efficient process for resolving disputes not only among REDD stakeholders, but also between stakeholders and public authorities. The law can set up alternative, more targeted dispute-prevention and resolution mechanisms, which can be more accessible than courts, affordable, more easily understood and possibly more effective, as ordinary judges may well lack the expertise necessary to address REDD-related disputes.

These dispute-prevention and resolution mechanisms should be equitable, transparent, accountable, legitimate, independent, free for claimants, and confidential where desired. These mechanisms should be made known to all the relevant individuals and communities, and should be expressly linked to more general policies, programmes and/or projects that can be adjusted to avoid repetition of harmful actions.[81]

National legislation can, for instance, provide for administrative appeals as a mechanism for the review of conduct of government officials at a higher level of the same government authority that authorized REDD activities. Legislation can also provide for the creation of alternative means for resolving disputes: REDD project proponents could be called upon to create an internal dispute-resolution mechanism (in the case of community-based projects) or complaint system (in the case of investors' projects). In these instances, the law should provide for a right to appeal such decisions to a court of first instance. Finally, legislation could call upon public authorities or private investors to make available to local communities affected by REDD activities dispute-prevention mechanisms through arbitration, mediation, and conciliation. Access to redress could also be provided, when decisions cannot be reversed.[82] National legislation could finally ensure financial and technical support to access justice.[83]

Key message: National legislation should provide for a fair and efficient process for preventing and resolving disputes not only among REDD stakeholders, but also between stakeholders and public authorities. This process should be accessible, affordable, widely known and culturally appropriate.

2.4 Participation in REDD activities

With regards to actual participation in REDD activities, the starting point could be existing legal guarantees or opportunities that communities enjoy as opposed to other REDD stakeholders in managing forests. National (forest or environmental) laws may have created a privileged legal basis for community-based forest management that may also be used for REDD activities.[84] In Madagascar, for instance, tripartite agreements between the State, the municipality, and community members

80 Forest Carbon Partnership Facility (FCPF), *supra* note 56.
81 Shelton, *supra* note 6.
82 Bond *et al*., *supra* note 7, p. 23.
83 *Ibid*.
84 Christy *et al*., *supra* note 5, pp. 83–100.

are foreseen, as are expedited and simplified processes for transferring forest management rights to communities.[85] In Guyana, Clause 11 of the Forests Bill also provides for community forestry management of State forests through an agreement with a community group, which must be registered as an NGO, as discussed in the relevant case study.

Different legal tools may be available at the national level for the implementation of REDD activities, depending on land and forest carbon tenure, other relevant rights and type of participants. Licences, leases, concessions or agreements could in fact be used. Notwithstanding the type of legal instrument, national legislation can ensure that certain REDD activities are led by communities, supported by public authorities, or are led by outside investors with some form of participation for communities.

National legislation may provide a basis for or give priority to community-led REDD activities.[86] To this end, such a preference could be spelt out by attaching priority to communities in the process for allocating REDD concessions (on the basis of geographical limitations and requirement for actual residency in areas with or adjacent to sites identified for REDD activities). The administration could also be legally mandated to provide necessary technical assistance to and otherwise support community-led REDD projects. The process leading to the establishment of these projects would entail: requiring the administration to adequately publicize opportunities to set up a community-led REDD activity; requiring that any persons living in the area or having strong traditional ties to it get a fair opportunity to join the community-led REDD activity; setting out selection criteria for the case in which more than one group or community may be interested in arrangements concerning the same land; requiring verification from the members of the group or community applying that their representatives have been appropriately designated and are serving as effective channels of communication for the group; and requiring prior informed consent from community members about respective rights and obligations and sharing of benefits. In addition, legislation could require consultation with various concerned actors, including central and local government, neighbouring communities, traditional authorities, landowners and others as may be appropriate; and require the government to consider existing rights of occupancy or use and either accommodate them into the arrangement, upon agreement of right holders, or compensate the right holders for their loss. Where rights are in dispute, the law should provide a mechanism for promptly resolving competing claims. Furthermore, national legislation could also empower the community to issue its own binding rules regarding the activity being undertaken, including rules on land access and use by the group and by third parties; and set out powers and duties for enforcement of any relevant applicable rules within the concerned area, including, where appropriate, enforcement by members of the group.[87]

In addition, national legislation can support (through incentives) or request communities' participation in investor-led REDD activities. To this end, it could set forth screening criteria in the selection of outside investors to ensure their capacity to manage the project and collaborate with communities. National legislation could then require the conclusion of an agreement setting out respective rights and obligations of the parties, including social obligations for outside investors to be defined in

85 Baker & McKenzie, *supra* note 12, p. 23.

86 These models have already been used for other forest uses: *see* Christy *et al*., *supra* note 5, pp. 83–100.

87 Adapted from Cirelli, M.T. and Morgera, E. (2009). "Wildlife law and the legal empowerment of the poor in sub-Saharan Africa". FAO Legal Paper Online #77. Rome, Italy: FAO.

consultation with concerned stakeholders. Legislation could further allow monitoring of compliance by the administration as well as by the public. It could, in addition, empower the State to cancel a concession for poor performance by the investor, in particular when social conditions and requirements for consultation or collaboration with communities are not respected.[88]

Overall, security of rights is the paramount objective to be achieved by national legislation in all these instances: guarantees should be in place against the threat of unjustified unilateral termination or changes in midstream, inappropriate duration of rights in relation to the timeline to accrue benefits, or unclear rights to exclude others from the resource and enforce rules against outsiders.[89] Security is an essential precondition for all participants in REDD activities – governments, communities, landholders and outside investors – to have a true stake in preventing deforestation and forest degradation.

Key message: National legislation should clearly spell out transparent and accountable mechanisms for community-led REDD activities or for community participation in investor-led REDD activities. Security of rights of all interested stakeholders should be the principal aim of these legal provisions.

2.5 Conclusions

As the Eliasch Review noted, "There will always be trade-offs between speed, simplicity and scalability of policy and programme development and implementation, and how closely involved all stakeholders can be. But the environmental and social sustainability of policies to reduce deforestation will depend on the buy-in of all interested stakeholders, and of those who live in and around forests in particular".[90]Participation may significantly contribute to ensuring that potential co-benefits of REDD (such as poverty alleviation, human rights protection, biodiversity conservation, provision of other environmental services)[91] are maximized and the potential negative impacts avoided or minimized. National legislation providing for participation and equitable balancing of different rights and interests is therefore necessary to this end, but it is just a first step in a complex process that requires goodwill and sufficient training on the part of public authorities, as well as good faith on the part of outside investors, landowners and communities. Lessons learnt in the context of good governance reforms in the forest sector may provide a useful starting point for specific discussions on participation in the context of REDD.

88 *Ibid*.
89 Christy *et al*., *supra* note 5, pp. 98–100.
90 Eliasch, *supra* note 76, p. 195.
91 Chapter 11: "How do we achieve REDD co-benefits and avoid doing harm?", in: Angelsen, A. (Ed.) (2008). *Moving Ahead with REDD: Issues, Options and Implications*, p.112. Bogor, Indonesia: Center for International Forest Research (CIFOR), which stresses that national action is ultimately necessary for the achievement of co-benefits.

3 Benefit Sharing

John Costenbader*

3.1 Introduction

One of the most challenging hurdles for successfully connecting national governance systems with the REDD component of a future UNFCCC agreement (hereafter "REDD regime") will be the receipt of financial inflows from international sources and distribution to relevant national actors. In an environmental law context, the term "benefit sharing" has a long history in a program of work under the Convention on Biodiversity (CBD) aiming to distribute financial results from the utilization of genetic resources to local inhabitants from whose lands such resources were taken. Similarly, government, private landowner and forest community actors most relevant to national forest governance, as well as outside investors and other supporting actors, will require equitable benefit-sharing arrangements to compensate them for their participation in REDD regimes. Given clear and effective legal frameworks, successful benefit sharing can help guarantee public support, promote environmental integrity and thus inspire investor confidence.

Analysis of REDD preparatory efforts to date suggests countries have paid insufficient attention to the apportionment of revenues amongst forest governance actors, and most benefit-sharing arrangements lack clarity as a result.[1] Additionally, financial experts warn of the potential impacts of large carbon finance revenue streams in developing countries with feeble rule of law and inadequate public financial management capacity, or where human rights norms are disregarded.[2] In addition to the concerns of local and indigenous communities relating to ownership and participation issues addressed in previous chapters, such groups are at risk of benefit-apportionment processes overlooking them or of losing any benefits promised them via intermediaries. In turn, such a result could undermine local populations' participation and support of forest conservation projects, and potentially the permanence of any carbon sequestered over the long term.

This chapter will focus on clarifying the legal aspects of benefit-sharing frameworks, although little national or sub-national law on the topic has been developed to date. The chapter will first provide a background on the broader notion of Payments for Ecosystem Services (PES) initiatives, of which REDD is a multi-level variety. Then the chapter will identify approaches for REDD accounting frameworks and the significance of such decisions on benefit sharing. The third and fourth sections of the chapter will focus on payment inflows from international sources and payment out-flows to local actors.

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1 *See generally*, Davis, C. *et al*. (2009). "A Review of 25 Readiness Plan Idea Notes from the World Bank Forest Carbon Partnership Facility". WRI Working Paper. Washington DC, USA: World Resources Institute.

2 Eliasch, J. (2008). *Climate Change: Financing Global Forests. The Eliasch Review*, p. 205. London, UK: Office of Climate Change.

Box 3.1 "Benefit sharing" defined

Although REDD incentives to national actors are often considered in terms of financial compensation, REDD incentives may be distributed to national actors in a variety of forms. At the time of writing, current UNFCCC negotiating text on REDD envisages preliminary phases of REDD compensation from developed countries as including legal and institutional capacity-building assistance to developing countries hosting REDD programs (as discussed in Sections 3.3 and 3.4).[3] PES projects have also shown a wide range of incentives beyond financial compensation (as discussed in Section 3.5.2). Although this publication takes no position on whether financial or non-financial forms are better for compensating developing countries hosting REDD programs, the term 'benefit sharing' rather than 'revenue sharing' is used hereafter to represent the wider potential stream of incentives currently considered in UNFCCC negotiations as well as potentially available at the national level to project actors.

3.2 Benefit sharing under PES

3.2.1 Payments for ecosystem services

A global REDD regime will largely consist of upscaling and formalizing via international and national legal processes the multitude of PES incentive-based private projects and government programmes that have existed both on a voluntary and a regulated basis around the world for several decades already. PES projects address the deficiency in "command-and–control" environmental and natural resource policies, which are less effective in ensuring the internalization of environmental externalities (i.e., the hidden costs to the public from environment-related decision making), such as those occurring when land owners convert forests to other uses and release carbon emissions. A general definition of PES helps highlight the key factors distinguishing such approaches from other incentive-based policies, as shown in Box 3.2.

Box 3.2 Definition of payments for ecosystem services

A generally-accepted definition of payments for ecosystem services (PES) consists of the following elements:

- A *voluntary transaction*
- A *well-defined ecosystem service* or a land use likely to secure its provision
- At least *one buyer*
- At least *one provider effectively controlling service provision*
- If and only *if the ecosystem service provider secures service provision* (conditionality)

Source: Wunder (2007).

3 UNFCCC. (2009) "Non-Paper No. 18: Policy approaches and positive incentives on issues relating to REDD". sect. 2, p. 3. 7th Sess. AWG-LCA, Bangkok, Thailand. 8 October.

Designing payments for ecosystem services as a traditional contingent contract (i.e., payment made conditional on actual performance), differentiates PES from command-and-control regulatory attempts to prevent deforestation. The contractual nature of PES systems also separates them from incentive-based methods where payments occur prior to performance and potentially without recourse in case of non-performance. To achieve conditionality, PES payments ideally should occur following verified performance in measurable units of the ecosystem service. Unfortunately, conditionality has been difficult to achieve in PES projects, limited largely to examples in developed economies and Latin America.[4]

3.2.2 PES transaction types

In analyzing the distribution of benefits in PES projects, a primary inquiry should be made as to where the main transactions between buyers and sellers take place. PES transactions are generally negotiated via national regulatory frameworks if government-managed, or via private contractual arrangements if directly arranged between buyers and sellers.[5] Be they privately or publicly arranged, PES transactions must address the allocation of benefits (i.e., how financial or in-kind payments flow from buyer to seller). In addition to these main concerns, a host of subsidiary issues are relevant to benefit-sharing contracts or regulations as well, such as the ecosystem services to be performed by the seller, period of performance, roles of brokers or other intermediaries, and environmental context considerations.[6]

In private PES deals, where buyers and sellers transact directly (or via decentralized government management), parties need signed contracts with legal due diligence, which ideally should be recorded in public land records. Lacking government regulatory enforcement of the PES agreement in private systems, contracts must specify the type, amount and duration of carbon sequestration services, buyer, seller and investor duties and responsibilities. For such contracts to function effectively, parties also require effective legal processes for enforcing agreements and contractual mechanisms to insure investments. The latter could be achieved either through contractual provisions on liability for non-performance or inability to perform (e.g., *force majeure* clauses in cases of natural disaster or expropriation), supplemental investment insurance, or by requiring buffer areas or banked reserve credits. Where private payments are made in a decentralized fashion to lower government levels or directly to local communities and project management groups, a tax or royalty may be due back to national-level governments, which would typically be designated for higher-level functions such as carbon accounting and forest monitoring.[7]

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4 Bond, I. *et al*. (2009). *Incentives to sustain forest ecosystem services: A review and lessons for REDD*, p.5. Natural Resources Issues 16. London, UK: IIED.

5 *See* Scherr, S. *et al*. (2004). *For Services Rendered: The current status and future potential of markets for the ecosystem services provided by tropical forests*, pp. 55–56. ITTO Technical Series No 21. Yokohama, Japan: International Tropical Timber Organization (ITTO).

6 Waage, S. *et al*. (2005). "A Guide to Conducting Country-level Inventories of Current Ecosystem Service Payments, Markets, and Capacity Building", p. 13. Washington DC, USA: Forest Trends.

7 van Noordwijk, M. *et al*. (2008). *Reducing emissions from deforestation and forest degradation (REDD) in Indonesia: options and challenges for fair and efficient payment distribution mechanisms*, p. 19. Working Paper 81. Bogor, Indonesia: World Agroforestry Centre (ICRAF).

Public payment systems require far more comprehensive procedures, beginning with the legislation allocating and funding administrative agencies to manage the PES system, as well as defining the scope of such entities' work. Under public payment schemes, contracts must be made via centralized authorities in the national government, which then disburse payments to state and local-level governments, and to project administrators and local or indigenous communities. Legislative and regulatory rules must define the services offered for purchase in public PES systems, as well as the eligibility of buyers and sellers, performance criteria, monitoring standards, payment terms and protocol for breach of contract, thus integrating the full terms of the contract and ensuring its performance.[8] Furthermore, public PES systems can offer a wide range of in-kind benefits, such as government services, no-interest loans, goods or tax credits, which can require greater regulatory planning and oversight than the cash payments generally only offered under private transactions.

3.2.3 REDD as a government-regulated, multi-level PES

From the general universe of PES incentive systems, four kinds of payment systems have been classified, as listed in Box 3.3 below. National regulatory frameworks are not necessary to facilitate the start-up and management of private project-level user-financed PES systems, such as voluntary corporate offsetting and eco-certification standards (types three and four in box 3.3). In these systems, project administrators can involve NGOs, community groups or private investors working with or without government coordination and contracting directly with domestic and international funders and investors.

Box 3.3 Four types of PES systems

- *public payment schemes* to private land and forest owners to maintain or enhance ecosystem services;
- *open trading between buyers and sellers under a regulatory cap or floor* on the level of ecosystem services to be provided;
- *self-organized private deals* in which individual beneficiaries of ecosystem services contract directly with providers of those services; and
- *eco-labelling of products* that assures buyers that production processes involved have a neutral or positive effect on ecosystem services.

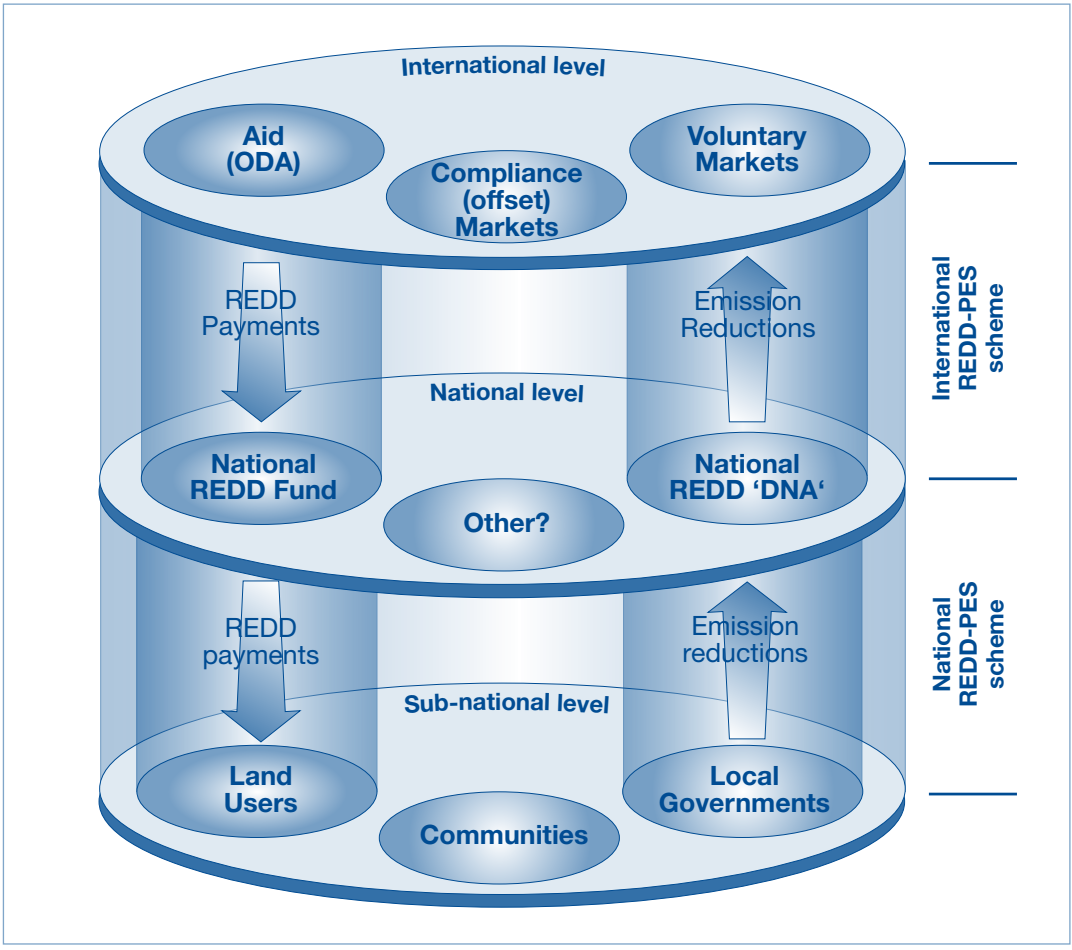
Source: Waage *et al*. (2005).

However, it is not likely that an internationally-binding REDD regime would be able to link forest carbon sequestration incentive payments directly with climate-neutral products, so the fourth PES category of eco-labelling will not be considered in this chapter. Similarly, self-organized, private PES incentives (Type 3) are not generally applicable to REDD, as the agreement envisions a "cap" on Party emissions driving the purchase of forest carbon emissions reductions, be they via public or private funds. (Theoretically however, a REDD regime or other legal framework for emissions reductions could provide incentives for either of these two PES systems). Thus, the focus in this chapter will be

8 *Ibid*.

on the first two schemes that are most likely to find their way into a future REDD regime – a publicly regulated fund, and a private market under a regulatory emissions cap.

An international REDD regime has been described as a multiple-level PES scheme (see Figure 3.1), with a first set of international PES payment "in-flows" coming from international public or private sources to national or sub-national level authorities. Most likely such payments would be coordinated between a national fund and national REDD Designated National Authority (DNA), as under the current Clean Development Mechanism (CDM) of the Kyoto Protocol. Subsequently, a second set of PES "out-flow" payments would be made between the relevant national or sub-national authorities, and project-level participants.[9] Of course, this schematic is rudimentary and does not fully encompass the spectrum of potential design options still undecided in a future REDD regime, which, depending on the finance mechanism and management scheme chosen, may include direct international to sub-national payments.



Source: Angelsen and Wertz-Kanounnikoff (2008); Bond *et al*. (2009), p. 6.

9 Bond *et al*., *supra* note 4, pp. 5–6.

Key messages: An internationally-financed and regulated REDD regime will require more comprehensive national legal frameworks than typical private or government-regulated systems. National legal provisions should be created or strengthened to ensure institutions and mechanisms facilitate benefit sharing from the international to national or sub-national levels, via either national regulations for public systems or contractual safeguards for private systems.

3.3 National or sub-national framework

Coordination of accounting and reporting related to international financial inflows with the national and sub-national activities requiring such funds will be a major factor in successfully linking a global multi-level REDD-PES scheme as well as in determining the level of regulation required for national REDD systems. As outlined below in Box 3.4, the main three options for REDD accounting schemes currently under consideration in international negotiations include national level accounting, project (or sub-national)-level accounting, and a hybrid (or nested) approach, which would allow for countries to aggregate accounting and reporting functions for various existing projects into an overall national approach.[10] Bearing in mind the ideally contingent nature of PES agreements, as mentioned in Section 3.2.1, it seems sensible from a project finance and contractual perspective to structure contracts in parallel with the level of accounting chosen under a future REDD regime (if that decision is made universally at the UNFCCC level).

Box 3.4 Three proposals on the geographical level or scale of REDD accounting and incentive mechanisms

A **national approach** envisions payments to be issued to a national representative body only when there is a reduction against the accepted national reference level. Local geographic areas, such as district or project areas, would not receive any direct rewards from international carbon buyers, even if making substantial reductions.

- ***Pros***: allows for national policies, addresses domestic leakage; country ownership; lower MRV and transaction costs per CO_2 equivalent; low-cost (non-PES) policies available.
- ***Cons***: favours middle-income countries; may not mobilize private investment or local government involvement; risk of powerful elite national elements capturing projects.

A **project (sub-national) approach** would require both REDD accounting and implementation to be focused on a defined geographic area or project site(s). Activities could be undertaken by individuals, communities, NGOs, private companies, and different levels of government. Monitoring, reporting, verifying (MRV) and payments would be performed only for sites in question.

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10 Angelsen, A. *et al*. (2008). "What is the right scale for REDD? The implications of national, subnational and nested approaches", pp. 31–32. CIFOR *infobrief* No. 15.

- ***Pros***: early involvement; wide participation by poor countries and those with weak governance; attractive to private investors; easy participation; can target poor groups.
- ***Cons***: domestic leakage concerns; cannot address broader deforestation drivers; weak government involvement.

A **hybrid (nested) approach** would allow payments to go directly to projects that achieve reductions, and also to the national level if there is a proven overall reduction. Project and national accounting would need to be harmonized, and any emission reduction credits issued at the sub-national level would be deducted from the national accounting. This would likely lead to deficits at the national level, which would be offset through the rewards allocated when the country consistently makes proven national reductions.

- ***Pros***: phased or joint private/public approaches possible; differentiated compensation mechanisms possible; flexibility allows sub-national projects to be compensated (where independently verified) even if no net reductions achieved at national level.
- ***Cons***: challenges of harmonization between the two levels; high MRV costs (requires disaggregated national data).

Sources: The Center for People and Forests (2009); Angelsen *et al*. (2008).

Sub-national governments may be the most appropriate entities for assessing net changes in terrestrial carbon stocks, regardless of the institutional control over lands and vegetation. Decentralization, however, may lead to increased corruption and 'elite capture' at local levels, as powerful groups with government connections dominate target communities.[11] In addition, the relative contribution of forests to the economy is likely to be more obvious, and economic uses of the forest are likely to carry greater weight at the local level than at the national level. Issues like carbon sequestration are thus likely to lose priority with decentralization. To minimize these problems, the central government can set general management goals and minimum standards for forest practices, as well as auditing or supervision functions.[12] Vertical allocation of REDD benefits also depends on where value addition occurs and on the opportunity costs occurring at each level. For example, in a national system, the government can be assumed to bear the costs of REDD monitoring and verification mechanisms, as well as for implementing any necessary policy and administrative reforms. However, the greater the level of devolution, the less economies of scale will exist and the higher the relative costs will be, as will be the opportunities for rent seeking. From the point of view of efficiency, then, it may be advisable to minimize the number of stakeholders.[13]

11 Casson, A. and Obidzinski, K. (2007). "From new order to regional autonomy: Shifting dynamics of illegal logging in Kalimantan, Indonesia". In: Tacconi, L. (Ed.) *Illegal logging: Law enforcement, livelihoods and the timber trade*, pp. 43–68. London, UK: Earthscan.

12 Christy, L.C. *et al*. (2007). *Forest Law and Sustainable Development: Addressing Contemporary Challenges through Legal Reform*, p. 86. Washington DC, USA: World Bank.

13 *See* van Noordwijk *et al*., *supra* note 7, p. 20.

Conversely, national-level accounting systems would enjoy greater efficiency via economies of scale in the form of centralized project accounting, project administration and monitoring, as well as common definitions and regulations for national projects. As many countries own or control large portions of available forest land at either a national or regional level, relevant government forest managers would need to design and implement REDD activities just as they have commonly done with afforestation and reforestation (A/R) activities under the CDM.[14] However, national governance capacity in many developing countries planning to host REDD activities is not currently adequate to fully perform the necessary monitoring and accounting functions, which furthermore lack adequate legal and institutional linkages with benefit-sharing decisions. Without adequate legal safeguards to ensure participation and objective selection of projects, centralized national systems may favour elite, larger projects and exclude small community initiatives, raising fairness concerns and preventing benefits from reaching local and indigenous landholders.[15] Judging from past experience, there is no guarantee that participatory processes would be included to the extent necessary to ensure that centralized national REDD regimes work.[16]

National governments eventually should be able to centrally manage accounting and crediting mechanisms for their forest carbon emissions, as national-level carbon reporting will be critical in assessing international progress towards combating climate change. Given some countries' short-term national capacity difficulties, however, an interim hybrid framework may offer a compromise between sub-national and national accounting and crediting systems. Under this option, existing national and sub-national capacity may be leveraged simultaneously in countries via nationally-aggregated project baselines and monitoring, allowing for a dual-track system of national and project-based crediting and reporting on forest carbon emissions sequestered.[17] Financial and in-kind public funding during this interim period could provide for the development of necessary laws and law enforcement capabilities, as well as legal and public financial management institutions, for equitable benefit sharing. From a legal perspective, a main goal of such work would be to develop integrated regulatory safeguards to monitor and ensure national monitoring, accounting and reporting correspond with credit or fund inflows and benefit outflows to sub-national-level recipients.

The nature of demand for carbon sequestration may also be an important consideration in determining the management structure for REDD frameworks. If government-to-government trading is preferred by Annex I Parties' national laws or is explicitly envisioned under a future REDD agreement, then national governments hosting REDD projects would be better off retaining control of carbon ownership and related benefits. However, if Annex I Parties' domestic legislation enacting a post-2012 agreement requires individual emitters to obtain offsets individually on an international market or directly from projects, and the REDD agreement is open to private funding, then developing countries

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14 Streck, C. and O'Sullivan, R. (2007). "Legal tools for the ENCOFOR Programme", pp. 9–10. Available online at http://www.joanneum.at/encofor/tools/doc/Encofor%20Contracts%20Manual.pdf.

15 Angelsen, A. (Ed.) (2008). *Moving Ahead with REDD: Issues, Options and Implications.* pp. 36, 115-16. Bogor, Indonesia: Center for International Forest Research (CIFOR).

16 *See* Foti, J. *et al*. (2008). *Voice and choice: Opening the door to environmental democracy*. p. 32. Washington DC, USA: World Resources Institute.

17 Pedroni, L. *et al*. (2009). "Creating incentives for avoiding further deforestation: the nested approach". *Climate Policy* 9(2): 207–220.

may be more flexible in their choice of ownership and benefit distribution.[18] In either instance, a hybrid approach could help to develop capacity for centralized national monitoring, accounting and reporting to the UNFCCC.

If the host country economy is faced with a volatile currency or poor market institutions, then it may be less practical to set up a national system based on direct payments in the national currency to sub-national or project levels, and in-kind payments might be preferred.[19] Similarly, corruption is a pervasive concern in several of the developing countries likely to host REDD investments and can pose a problem even for some countries with quite sophisticated legal systems. However, greater room for both public and private graft might be found where laws and regulations are duplicative or opaque. Consequently, clear legislation and streamlined regulatory provisions facilitating independent investigations and auditing might offer one legal solution to ensuring that benefits reach their intended recipients.

In cases where countries devolve REDD systems to the project level, allowing for direct payments between landowner sellers and buyers, a basic set of regulations should govern such transactions. These regulations must encompass a wide spectrum of potential carbon sequestration services sellers, including corporations and medium- to large-sized landowners, as well as small-scale local and indigenous communities. With regard to benefit sharing for larger, commercial sellers, policy makers will need to design legal mechanisms guaranteeing just adjudication of contractual disputes. Specifically, such mechanisms should provide for financial recourse in the case of accidental or intentional deforestation, including the sophisticated scientific and financial considerations of carbon sequestration (as discussed in Chapter 1 on ownership and Chapter 4 on permanence). Conversely, legal provisions affecting smaller landowners and local and indigenous carbon sellers should be designed to protect their share of benefits, which could otherwise be put in jeopardy due to inadequate land title or access. Additionally, legal safeguards should include special measures to ensure smaller landowners are aware of and can participate in the design of benefit-sharing regulations affecting their forest land.

The case studies presented in Annex II show a range of management-level approaches. The Papua New Guinea (PNG) draft REDD Policy to be released in October 2009 is expected to mandate national-level regulation of sales of carbon via voluntary carbon agreements.[20] Similarly, Indonesia (not surveyed in this study's cases but a major player in REDD) has taken a decisive stance towards national-level public administration and regulations of all REDD projects in the country via its national REDD and revenue-sharing regulations. In contrast, project benefits in Brazil are largely managed at a sub-national level, as in the case of the Juma Project, where payments were made to the state of Amazonas and later disbursed to government and community programmes as well as individual landowners.

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18 Rosenbaum, K.L., Schoene, D. and Mekouar, A. (2004). *Climate change and the forest sector. Possible national and subnational legislation*, p. 35. FAO Forestry Paper 144. Rome, Italy: FAO.

19 *Ibid*.

20 Baker & McKenzie, Covington & Burling LLP. (2009). "Background Analysis of REDD: Regulatory Frameworks", pp. 62-63. Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Sydney, Australia: Baker & McKenzie.

Key message: Governments should develop capacity for full national carbon accounting and reporting as soon as possible. Countries needing time to do so in the early years of REDD should consider capitalizing on project-level monitoring and accounting capacity, potentially via a hybrid "phased" approach. Additionally, regulatory and contract safeguards for auditing, enforcement and revenue distribution should verify benefits correspond to actual emissions reductions and are received by the actors responsible for those reductions.

3.4 REDD benefit inflows

3.4.1 Choice of finance mechanism

Although the scope of this publication is national-level REDD frameworks, international-level decisions regarding REDD funding will have important consequences for REDD benefit sharing at the national level. The clearest such implication will be the form of the benefit in-flow from international buyers to actors at the national level. Under a public fund approach, benefit payments may be in cash or in kind. Depending on the management approach chosen (e.g., national, project or hybrid, as described in the preceding section), public funds could be provided to governments, landowners or project developers. Under a private market approach, benefits would be in the form of carbon credits from either an international REDD oversight agency or some other crediting body.

National positions on REDD funding in international negotiations present a divergence of preferences for future REDD funding regulations. Brazil is currently on a two-track system, with the national government advocating public funding only for REDD projects at the international level and via its Amazon Fund, but states pursuing private carbon market funding for the numerous projects in their territories.[21] PNG has no official projects to date, but the country has been a leader in UNFCCC negotiations in advocating access to carbon markets, and is expected to draft a REDD policy towards carbon credit sales.[22] Indonesia has both publicly- and privately-funded projects, and like Guyana, which lacks projects, advocates a phased approach from public funds to markets. Cameroon, like many African countries preparing for REDD projects, currently only has publicly funded initiatives.

The additional significance of a choice of public or private funding for REDD lies in the different perspectives of government funders and individual investors with regard to risk. Governments and multilateral donors such as the World Bank (WB) are more likely to fund projects in least-developed countries and even politically or environmentally vulnerable areas, and also more interested in insuring that benefit-sharing schemes are fair, participatory and reach the relevant landowners. Thus far, carbon sequestration PES serving as pilot projects for REDD have mainly been funded publicly by bilateral and multilateral donors, with some voluntary corporate donations, in initiatives such as the UN-REDD, WB Forest Carbon Partnership Facility (FCPF), regional consortiums like the Congo Basin Forest Fund and the Amazonas Fund, as well as via traditional Official Development Assistance (ODA) initiatives.[23]

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21 *Ibid*., pp. 50–52

22 *Ibid*., pp. 16–17.

23 Westholm, L. *et al*. (2009). *Assessment of existing global financial initiatives and monitoring aspects of carbon sinks in forest ecosystems – The issue of REDD*, p. 86. Focali Report 2009:01. Gothenburg, Sweden: Forest, climate & livelihood research network.

By contrast, private investment funds and corporations purchasing offsets would be more likely to focus on finding secure investments providing a guaranteed return.[24] Despite a growth in standards such as the Climate, Community and Biodiversity (CCB) standards and others under the Voluntary Carbon Standard (VCS) guidelines for Agriculture, Forestry and Other Land Use (AFOLU) projects, private-sector participation has been minimal in REDD pilot projects to date, due in part to uncertainty regarding host country regulatory frameworks.[25] Based on African countries' experience of negligible private investment under the CDM, African Parties to the UNFCCC generally have pressed for public funding options for REDD in international negotiations, with some African countries insisting on public-only funding.[26]

Additional uncertainty stems from the fact that the legal status of carbon sequestration investments in countries likely to host REDD projects may be unclear with regard to potential expropriation recourse under relevant bilateral or multilateral investment treaties.[27] Consequently, unless private investors in REDD projects draft strong contractual safeguards and host country judicial systems respect the norm of *pacta sunt servant* (i.e., faithfully uphold private contracts), investors could find themselves lacking recourse in countries lacking strong rule of law.[28] Thus, the inflated risk of countries with uncertain legal regimes would give further pause to private investors and depress such countries' international private funding. Strong rule of law in national REDD regimes, including revenue-sharing regulations, will therefore go far in instilling confidence in private investors, a fact not lost on Indonesia in becoming the first country to pass a national REDD law and accompanying revenue regulation.

3.4.2 Basis for a phased approach

Although healthy debate on REDD funding continues to date, research suggests a mix of both public and private funding may be necessary to ensure the necessary volume of carbon sequestration is purchased for climate change mitigation goals in a future agreement.[29] Notably, the 2008 Eliasch Review of forest carbon finance found that REDD investments must total US$17–33 billion annually in order to halve GHG emissions by 2030, but a modelling scenario of carbon market funding would only supply US$7 billion. In order to meet emissions reductions targets under this projection, then, the US$10–26 billion shortfall in funding would then need to be supplied by Annex I public funding.[30]

Given the probability that private investment would be weaker in higher-risk countries, it could be necessary to ensure public funding at least during an interim period (i.e., by a international REDD funding "phased approach") for countries where private funding may not be available. If public funding occurs in a preliminary phase, high-risk countries may take advantage of the wider array of financial and capacity-building benefits, and less risk-averse support, than private markets might

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24 Streck and O'Sullivan, *supra* note 14, pp.10–11.

25 Baker & McKenzie, *supra* note 20, p. 20.

26 Karousakis, K. and Corfee-Morlot, J. (2007). *Financing Mechanisms to Reduce Emissions from Deforestation: Issues in Design and Implementation*, p. 39. Paris, France: OECD (noting position of Central African Forest Commission (COMIFAC) Stabilisation Fund).

27 *See*, e.g., Morgan, J.P. (2007). "Carbon Trading Under the Kyoto Protocol: Risks and Opportunities for Investors". *Fordham Environmental Law Review* 18: 151–184, pp. 170–175.

28 *Ibid*.

29 Stern, N. (2006) "Executive Summary". In: Stern, N. *The Economics of Climate Change: The Stern Review,* p. 537. Cambridge, UK: Cambridge University Press.

30 Eliasch, *supra* note 2, p. 222.

allow. In doing so, however, public funders will need assurances from host country governments that forest governance will be improved during that interval, or such risk will end up being subsidized indefinitely and result in moral hazard.[31]During that interim time period, publicly funded cash and in-kind benefits could focus on improving legal mechanisms in relatively risky countries with inadequate rule of law, including legal provisions to ensure benefits reach their intended recipients. As forest carbon sequestration units would not be available in the early part of such an interim phase, public funding could retain its original contractual nature (rather than become pure development aid) by making payments conditional on proxy indicators for forest governance reform efforts, as under consideration in UNFCCC negotiations at the time of this chapter's writing.[32]

Key message: National legislation should clarify and strengthen private investment recourse mechanisms and contract enforcement standards in order to increase private investor confidence in higher-risk REDD candidate countries. Ideally, a preliminary phase of public funding should be used in countries lacking capacity as an opportunity to develop requisite laws and institutions.

3.5 REDD benefit outflows

3.5.1 Actors receiving benefits under national frameworks

In considering legal mechanisms to channel funds in order to attain the maximum results (i.e., equity, efficiency and effectiveness, as outlined in this book's introduction), it is helpful to consider the main national actors needed for long-term, effective REDD governance, as well as their disparate needs. Nationally, incentives for good forest governance should be divided primarily among governments, private landowners, and local and indigenous communities.[33] In addition to these three main national actor groups, benefit-sharing laws cannot overlook outside (or foreign) investors, as well as a host of supporting participants. Such consideration of actors and their respective needs is especially relevant for the early years of national REDD initiatives, when national capacities and legal frameworks for forest governance must be improved quickly.

Both as the primary agents of REDD national governance and major landowners of forest lands in many tropical forest countries,[34] national and sub-national governments will require special capacity-

31 Moral hazard refers to the "risk or probability of loss or injury, esp. a loss or injury covered by an insurance policy." (Black's Law Dictionary, 7th Ed: 2009). In this case, the term refers to the potential for publicly-funded countries permanently insulated from market competition to avoid making the necessary forest governance reforms for REDD, thus resulting in risk of continued deforestation.

32 UNFCCC *supra* note 3, p. 3. ("Actions to be undertaken by Parties […] in combination with compensation for proxy-based results for emission reductions [and removals] (phase 2)"). *See also* Streck, C. *et al*. (2009). *REDD+ Institutional Options Assessment: Developing an Efficient, Effective, and Equitable Institutional Framework for REDD+ under the UNFCCC*. pp. 4-5. Meridian Institute (describing the steps of a potential "Phase 2a" scenario for public funding of proxy-based results).

33 Johns, T. *et al*. (2008). "A three-fund approach to incorporating government, public and private forest stewards into a REDD funding mechanism". *International Forestry Review* 10(3): 458–464, at 461–463 (explaining that actors in government, private landowner stewards and public forest steward groups would have their respective benefit shares delineated in a public funding phase and subsequently phased out in the progression towards private market funding, and each could receive individually tailored capacity-building support during the interim public funding phase).

34 Karousakis and Corfee-Morlot, *supra* note 26, p. 36.

building and technical support for the development of new laws or regulations, and potentially for the modification and streamlining of existing laws. In addition, funding would be needed for increased government administration, monitoring and enforcement costs, the latter two of which would work in tandem with financial incentives to curb illegal deforestation activities. As the Juma Project overview in the Brazil case demonstrates, numerous other auxiliary government services could require funding in delivering on long-term REDD projects as well, such as health, education, and local capacity building.

As the main stewards of privately owned or controlled forests, private landowners are generally the most market-oriented of national actors and thus the most prone to various deforestation drivers in REDD candidate countries.[35] Depending on the national context, such drivers can include logging, agriculture, livestock, mining or biofuels interests. As such, this group will require financial incentives primarily to compensate for the opportunity costs of avoided deforestation on their lands. The third group of REDD actors, local and indigenous communities, is comprised of people living on or nearby forest lands with customary or formal legal access or ownership rights to those lands. Given the often close and enduring connection between local and indigenous communities and their forest lands, this group's receipt of fair incentives for participation in and support of REDD projects will be essential to long-term forest conservation.

Based on national experiences with A/R projects under the CDM, where sophisticated Kyoto Protocol and UNFCCC procedures and modalities required extensive reliance on international expertise, the early years of national REDD efforts will likely need similar assistance.[36] Beyond these three groups of national actors, then, a large number of private or public outside investors will be needed at the sub-national or national levels to develop projects and facilitate transactions, and thus also must be included in the distribution of benefits. This category would include investors, insurance services, project designers and developers, business and technical services, and financial intermediaries such as carbon credit brokers. Based on PES experiences, an adequate domestic supply of private intermediary institutions would not be available in the early phases of REDD development and as a result must be facilitated by government agencies or NGOs. As such processes mature, private institutions should take over such roles, allowing governments to concentrate on setting regulatory frameworks for REDD and rules for public payments, as well as overseeing participatory processes and land ownership and use rights issues.[37]

As national contexts will differ widely among countries hosting REDD projects, governments will need to assess their own unique set of national stakeholders, social and natural resource dynamics, and deforestation drivers. Lessons from past and ongoing PES projects largely support direct payments to people responsible for providing the ecosystem services, here generally the local and indigenous communities living in or around forests that protect and maintain them.[38] However, governance

35 Johns *et al*., *supra* note 33, p. 462.

36 Robledo, C. *et al*. (2008). *Climate Change and Governance in the Forest Sector: An overview of the issues on forests and climate change with specific consideration of sector governance, tenure, and access for local stakeholders*, p. 21. Washington DC, USA: Rights and Resources Initiative.

37 Scherr, S.J. *et al*. (2006). *Developing Future Ecosystem Service Payments in China: Lessons Learned from International Experience*, pp. 30–31. Washington DC, USA: Forest Trends.

38 Karousakis and Corfee-Morlot, *supra* note 26, p. 35.

measures will require significant funding, and without adequate incentives for private landholders or foreign investors, REDD programmes may not be feasible. Where funds are limited, countries may allocate funds horizontally according to prescribed criteria and establish benefit eligibility via competitive bidding processes, with safeguards to ensure smaller landholders and marginalized groups are not disfavoured by such practices.[39]

Key message: National legislation should partition benefits among primary REDD forest governance actors, as well as outsiders facilitating project start-up and administration. Processes for apportioning benefits must be unbiased and participatory, and oversight provisions coupled with law enforcement mechanisms should ensure benefits reach intended recipients, in particular those lacking information or access to justice such as local and indigenous communities.

3.5.2 Benefit options at the sub-national level

The determination of what constitutes a "benefit" to local recipients depends in part on where the locus of payments is established and which entities distribute benefits under what regulations. Although benefits at the international level are commonly equated with price-per-ton of carbon sequestered, REDD payments can take a variety of forms at the local level (including direct payments in carbon units, if a privately financed, sub-national approach is taken). Ideally, benefits also should include opportunity cost and carbon sequestration considerations, as described below. While governments or forest carbon sellers may receive lump payments on a per-credit basis in private transactions via international carbon markets, voluntary carbon-offset deals can compensate sellers directly on a continual basis via cash or in-kind payments (as in the case of the Juma Project in Brazil). By comparison, publicly funded approaches and government-managed systems potentially would be able to structure payments to landholder sellers via an even wider array of alternative benefit streams.

Examples of benefits from PES and REDD pilot projects include direct financing in either fixed terms or royalties linked to market prices, subsidies or tax credits (discussed further below), education and capacity building, local development projects, loans, debt swaps and employment opportunities.[40] Possibly solving the challenges of unclear land title and inadequate funding for benefits simultaneously (although not without the potential for misuse itself) conditional land rights have been used as a payment to landholders instead of cash in the Sumberjaya PES project in Indonesia.[41] Access to or use of NTFPs presents another type of benefit, which some researchers on forest carbon PES theorize could allow for reduced cash or credit compensation to such landholders, given the relatively lesser opportunity cost of avoided deforestation on such lands.[42] In this regard, the Bonn Guidelines for national access and benefit-sharing regimes give examples of the wide range of benefits with which national governments have chosen to compensate citizens for commercialization of their genetic resources under the CBD. The Guidelines may also provide lessons for REDD national law

39 *See* van Noordwijk *et al*., *supra* note 7, p. 20.

40 *Ibid*., pp. 15–18

41 Bond *et al*., *supra* note 4, p. 9.

42 Ogonowski, M. *et al*. (2009). "Utilizing Payments for Environmental Services for Reducing Emissions from Deforestation and Forest Degradation (REDD) in Developing Countries: Challenges and Policy Options", p. 15. Washington DC, USA: Center for Clean Air Policy.

development on integration in benefit-sharing arrangements between the national and international levels, as highlighted in Box 3.5 below.

Box 3.5 Guidelines for national legal arrangements addressing ABS under the CBD

The CBD recognizes States' sovereign rights over their natural resources, and specifically under Article 15.1 States have authority to determine control over access to genetic resources (GR) via national legislation. The CBD does not list the exact benefits to be shared. However, the wording of Article 15.7 encompasses a broadly-conceived notion of benefits, including commercial and non-commercial benefits, and results of research and development. Furthermore, Article 16 includes transfer of technology as a benefit that the providing country should receive in exchange for access to GR. Since the adoption of the CBD, some developing countries have formulated laws on ABS. Other countries with less genetic resources have neglected to enact any ABS legislation, implying a "free access" system subject to domestic property law. The Bonn Guidelines to the CBD, a nonbinding document designed to help Parties implement national ABS regimes, echoes the CBD's respect for national sovereignty, stating in Paragraph 4 that "Nothing in these Guidelines should be interpreted to affect the sovereign rights of States over their natural resources". The Guidelines list an extensive yet non-exhaustive number of monetary and non-monetary befits that may arise from the utilization of genetic resources.[43] Implementation of the Bonn Guidelines in India, Brazil, the Philippines and South Africa shows a range of national perspectives on benefit-distribution regulations and types of benefits governments have allocated to local and indigenous citizens in return for use of their natural resources.

Under the state-centralized GR management chosen in India, the federal administrative authority charged with administering its national biological diversity legislation was given discretion to direct financial payments to individuals, groups or organizations if biological resources or associated knowledge were acquired from them.[44] Otherwise, such payments are placed in a National Biodiversity Fund.[45]

- In Brazil, centralized GR management has also evolved, and access is granted only with a signed contract of use and benefit sharing. A provisional measure defines "benefits" as including sharing of profits; payment of royalties; technology transfer; licensing of products and processes without cost; and capacity building.[46] However, currently no Brazilian legal mechanism exists to ensure equitable contract terms or regulate benefit distribution.[47]

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43 Secretariat of the Convention on Biological Diversity (SCBD). (2002). *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization,* Appendix II, p. 18 ("Monetary and Non-Monetary Benefits"). Montreal, Canada: SCBD.

44 The *Biological Diversity Act*, 2002, § 21(3).

45 The Indian *Societies Registration Act,* 1860.

46 *Medida provisória Nº 2.186-16 sobre o acesso ao patrimônio genético,* 2001 (Provisional measure on access to genetic resources and traditional knowledge), Art. 25.

47 Tustin, J. (2006). "Traditional Knowledge and Intellectual Property in Brazilian Biodiversity Law". *Texas Intellectual Property Law Journal* 14: 131–162, at 131 and 147.

- The Philippines takes a more formulaic benefit determination than Brazil or India, despite a similar centralized approach to GR control. In the Philippines, an Executive Order requires applicants to pay royalties or other compensation to the national government and indigenous or local communities concerned, and applicants are to conduct research in collaboration with national scientists and institutions.[48]
- In contrast with the centralized state GR control of others, South African law regards all biodiversity as private property, thus proclaiming that no property may be taken without a non-arbitrary use of a general law with a public purpose and requiring compensation to the owner.[49, 50] Under South African biodiversity legislation, an access permit is granted only if the applicant and a stakeholder have entered into a benefit-sharing agreement duly approved by the Environmental Ministry.[51] Benefits can be whatever the parties decide, and the national government oversees the contracts to ensure that they are reasonable. The Act also establishes a Bio-prospecting Trust Fund into which all payments are made and benefits are distributed.

Sources: Roberts (2009); Secretariat of the Convention on Biological Diversity (2002), Appendix II; Carrizosa *et al.* (2004), p.14

National experiences in benefit sharing under the CBD demonstrate that nationally-based REDD regimes offer governments the chance to determine not only the types of benefits devolved to local participants, but also whether benefits are due automatically or only at government agency discretion. Moreover, the case of Brazil underscores that benefits defined in law lack meaning if not coupled with legal mechanisms to ensure delivery to actors.[52]

3.5.3 Taxes, subsidies and state payments

Benefit streams to landholders likely will be affected by tax regulations. National governments could also require a portion of credits from REDD programmes, or revenue from the sale of such credits. As described above, taxes and royalties to the national government would make more sense where projects are funded in a decentralized fashion to provincial authorities or directly to projects, as national authorities could take their portion of REDD credits or revenues directly from national inflows. Given the 'public good' nature of GHG mitigation, governments may decide taxpayers should participate in its encouragement. Under government-managed programmes, tax credits, subsidies, and other forms of state benefits can also constitute incentives for forest protection, as exemplified in the cases from Costa Rica and the Dominican Republic in Box 3.6.

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48 *Executive Order 247 on Access to Genetic Resources* of 1995, § 5(e).

49 Bond *et al*., *supra* note 4, at 229.

50 *Constitution of the Republic of South Africa*, § 25(1).

51 *National Environmental Management: Biodiversity Act 10 of 2004* (Jun. 7, 2004).

52 Peskett, L. *et al*. (2008). "Making REDD work for the Poor", p. 4. A Poverty Environment Partnership (PEP) Report. IUCN; ODI; UNDP; SIDA; ADB; DFID; Ministère de l'Ecologie, de l'Energie, du Développement durable et de l'Aménagement du territoire; UNEP-WCMC.

Box 3.6 State tax credits as PES incentives for forest projects in Costa Rica and the Dominican Republic

Costa Rica and the Dominican Republic offer examples of government tax credits and state subsidies to pay landholders for protecting forests. In 1996, Costa Rica passed a new *Forestry Law* (No. 7575). Article 46 of the law creates the National Forest Finance Fund (FONAFIFO). Article 22 of the law allows FONAFIFO to issue forest landowners certificates for forest conservation (CCBs) representing payment for ecosystem services. The landowners can use CCBs to pay taxes and other fees owed to the government. Similarly, in December 1999, the Dominican Republic enacted a new forest law (*Ley* 118-99). Article 95, paragraph I of the law allows the national forestry agency, INAREF, to adopt regulations creating special incentives to promote the valuation of the ecosystem services of forests, including carbon fixation. The State will also issue negotiable reimbursement certificates to finance 80 percent of the expenses of capital and investments made in the establishment and handling of plantations and management and protection of forests. The expenses include payment of all applicable taxes.

Source: Rosenbaum *et al*. (2004), pp. 25 and 27.

Ideally, national framework REDD regulations should specify clearly the form and amount of taxes, royalties, credits or revenues to be paid to the state, where such funds are to be directed (e.g., state climate change adaptation fund or government capacity building), as well as what amounts would be left for state programmes and local populations. The cases show a wide divergence in state tax and royalty treatment of REDD pilot projects. PNG envisions dedicating a two percent tax on REDD projects to an adaptation fund, while Cameroon[53] and Guyana will take all REDD proceeds at the national level and redistribute them among government offices and local communities. Guyana has not finalized its benefit-sharing arrangement, but it has specified that it intends to manage revenues via a newly established national Low-Carbon Finance Authority. In Brazil, funds such as the national Amazon Fund and state of Amazonas climate change fund would pay for ecosystem services including avoided deforestation, but State authorities may take a portion of the revenues from their respective local initiatives, such as the Juma Project's payments to Amazonas. The state of Amazonas has devised a system of monthly "forest grants" (*Bolsa Floresta*) to pay households for non-destructive forest activities in "sustainable development" protected areas, as outlined in Box 3.7. It is worth noting that family payments are made to wives, as the family members typically responsible for household expenses and much of the work in REDD programmes, thus reducing potential gender inequities in *Bolsa Floresta*.

53 In Cameroon, state royalties in accordance with the 1994 forestry legislation have been proposed on REDD pilot project revenues, which the state will redistribute.

Box 3.7 Forest conservation grants under the State of Amazonas Bolsa Floresta

Type of forest grant	Beneficiary	Amount (in Brazilian Reais (R$))	Payment	Use of resources
Forest Grant	Family (wife)	R$50 a month	Via specific programme card	Family expenses
Community investment programme	Reservation communities	Average of R$4,000 a year	Straight transfer to the community or credit in local commerce system	Investments in activities for the generation of sustainable income
Forest grant association	Association of reservation dwellers	10% of the annual amount received by all the families of dwellers paid once a year	Transferred directly to the association or credit in the local commerce	Expenses as discussed and approved by the communities in meetings

Key message: National legislation for benefit sharing should specify clearly what benefits will be distributed to which sub-national actors (as well as what taxes or royalties are due to national governments) and, in conjunction with local participatory processes, consider the range of benefits at government disposal. These state benefits may include such forms of compensation as royalties on project revenues or credits, tax relief and subsidies, or land ownership or use made conditional on performance.

3.5.4 Transaction considerations

A number of transactional issues will have important implications for benefit-sharing goals of REDD, and thus should be considered in the design of national legal frameworks. Most such considerations are relevant to both national and project-level systems, albeit with greater government involvement and regulatory control in national systems.

As REDD agreements are a form of contingent contract requiring performance of the promised service before payment, ideally payments should be made *ex-post* in order to ensure environmental integrity.[54] Although cap-and-trade systems generally have integrated compliance measures to ensure environmental integrity, baseline and credit mechanisms as contemplated in a future REDD system would lack such insurance, further supporting the need for *ex-post* payments.[55] However, due to the inherent uncertainties in carbon sequestration project performance and establishment of credits, sellers likely will try to build flexibility into the time frame and volume of credits to be delivered.[56] Small landholder sellers most likely will need partially *ex-ante* payments due to their relatively high start-up administrative costs, but such needs may be addressed by scheduling payments over regular intervals, thus maintaining incentives for long-term permanence in carbon sequestration.[57]

54 Karousakis, K. (2007). *Incentives to reduce GHG emissions from deforestation: lessons learned from Costa Rica and Mexico*, p. 35. Paris, France: Organisation for Economic Co-operation and Development (OECD).

55 *Ibid*.

56 EcoSecurities. (2007). "Policy Brief: REDD Policy Scenarios and Carbon Markets", p. 7. Oxford, UK: EcoSecurities.

57 *See* van Noordwijk *et al*., *supra* note 7, p. 21.

Where projects depend on significant direct financing from a single donor government or consortium of governments, and thus continuing political support behind such funding, projects should be structured to deliver credits and make payments in shorter intervals between political cycles.[58]

In order to reduce transaction costs and include smaller landholders' participation, collective contracts can be used to bundle carbon contracts with smaller landholders, as has been done with success in PES programmes in Mexico and Costa Rica.[59] Regulatory safeguards should ensure smaller landholders have both adequate awareness and the opportunity to bundle two or more nearby projects into a single REDD unit, and legal provisions should clarify the mechanics of such procedures as well as how landholder rights and responsibilities are affected.[60] Prior informed consent should be offered in this regard, in particular to local and indigenous communities.[61]

In determining prices to pay landholders (or percentages of revenues, depending on the REDD scenario), incentives must be designed to ensure both those currently deforesting are given a reason to stop deforesting, while also benefiting those parties who have never engaged in deforestation but are dependent on the forests themselves (and might have a perverse incentive to begin deforesting if not compensated).[62] Where possible, REDD payments to poor groups in particular may be pooled with further PES payments rewarding protection and enhancement of other ecosystem services such as biodiversity or water management. Given that REDD projects will occur in developing countries with underdeveloped market institutions and few related service providers (e.g., lawyers, accountants, consultants), transaction costs are generally high for all parties, which takes an especially high toll on local and indigenous communities with scarce resources for such ventures, unless their services are bundled successfully.[63] In PES projects to date, such groups have often received payments from intermediaries far below what buyers pay for the services, underscoring the need for eliminating multiple layers in forest carbon transactions.[64]

Research from past PES projects shows that even small payments can represent a helpful extra income source to landowners or service providers already successfully managing carbon sequestration and facing few start-up costs (as in the case of Guyana, given its low historical deforestation rate).[65] Conversely, the higher the start-up or the opportunity costs of preserving forest (i.e., the higher the number of alternative uses for forest land and resources that undermine carbon sequestration, or deforestation rate by proxy), the greater payments must be in order to affect local behaviours.[66] Policy makers thus should strive to align carbon prices on international markets with

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58 *Ibid*., pp. 9–10

59 Bond *et al*. *supra* note 4, p. 13.*See also* Karousakis, *supra* note 57, p. 36 (citing examples of PES programmes in Costa Rica and Mexico with transaction costs of 18 percent of total costs).

60 Baker & McKenzie, *supra* note 20, p. 13.

61 Manguiat, M.S.Z., *et al.* (2005). *Legal Aspects in the Implementation of CDM Forestry Projects*, p. 31. IUCN Environmental Policy and Law Paper No. 59. Gland, Switzerland and Cambridge, UK: IUCN.

62 Moutinho, P. and Schwartzman, S. (2005). *Tropical Deforestation and Climate Change*. Belém, Brazil: Instituto de Pesquisa Ambiental da Amazônia (IPAM); and Washington DC, USA: Environmental Defense (ED).

63 Bond *et al*., *supra* note 4, pp. 11–13.

64 *Ibid*.

65 Scherr *et al*. (2006), *supra* note 40, p. 35.

66 *Ibid*.

national payments, as well as to permanently mitigate national deforestation drivers by ensuring payments change behaviours over the long term.[67] Preferably, payments should balance the need to reward landholder activities relative to both units of carbon sequestered and opportunity costs of forest hectares preserved.[68] Furthermore, payments could be made dynamic rather than static, to reflect changing opportunity costs and international carbon prices.[69] Although complicated, such considerations might be incorporated in contracts with an updating clause, or via regulations specifying formulas for determining payments based on local and international indices, analogous to tax codes.[70] The dangers of instituting payments for ecosystem services without connecting those payments to recipients' opportunity costs (and without adequately safeguarding payments from favouritism) are shown in the example from Costa Rica in Box 3.8 below.

Box 3.8 PES benefits for forest ecosystem services in Costa Rica

During the latter half of the 20th century, Costa Rica's deforestation rate was among the highest in the world due to expansion of the road system, cheap credit for cattle, and land titling laws that encouraged deforestation. Conservation policies in later years slowed deforestation rates considerably, but the country's forests remained under threat from illegal logging and agricultural expansion. In 1996, the country adopted a new *Forestry Law* (No. 7575) recognizing the environmental services provided by forests, which laid the groundwork for a new policy the following year of *Pagos por Servicios Ambientales* (PSA). The PSA programme recognizes four environmental services provided by the forest: carbon fixation; hydrological services; biodiversity protection; and provision of scenic beauty. PSA goals are met through site-specific contracts with individual farmers, who are eligible to receive annual payments for forest protection, reforestation, sustainable forest management (discontinued in 2003), agroforestry, and natural forest regeneration (beginning in 2006).

The overall effectiveness of the programme is difficult to determine, however. The PSA programme was instituted at the same time as a package of other measures, including a ban on clearing forest. Changes in the profitability of livestock production had also reduced pressure to convert forests to pasture, particularly in marginal areas. In addition, many PSA participants stated they would have protected their forest even in the absence of the PSA programme. Several studies indicate that many of the funded projects may not have been additional, given that the selection process does not consider differences regarding risk of deforestation and opportunity costs. The bulk of programme benefits also tend to go to larger and relatively better-off farmers, those more familiar with the forest engineers in charge of promoting the programme and with forestry-related subsidies. Costa Rica's national law also forbids using public funds to pay landholders who lack formal title, which discouraged the participation of the poor early on in the programme.

Sources: Pagiola (2008), as cited in Ogonowski *et al*. (2009), pp. 5–6; Peuker (1992).

67 Ogonowski, *supra* note 45, pp. 13–14.
68 *Ibid*., p. 14.
69 *Ibid*., p. 15.
70 *See* van Noordwijk *et al*., *supra* note 7, p. 20.

If REDD host countries can create comparable flexibility in payments according to opportunity costs and carbon units, the additionality problem of rewarding landholders in countries with a low deforestation rate (e.g., Guyana) relative to those in countries with a high deforestation rate (e.g., Brazil) could be resolved. However, as mentioned above, incorporating sophisticated legal, economic and financial considerations into national law could be overly complicated for countries with insufficiently developed legal structures and institutional capacity, and methods for determining payments may depend on national context.[71] Standardized measures should be developed and implemented where possible in order to simplify rule making, such as standardized carbon emissions reference levels, whereby a central international body could verify reference levels and a third-party verifier would only need to confirm activities performed.[72] Increased government legal and other technical capacity in such areas might be addressed during an initial public funding phase.

If REDD programmes are structured to completely restrict access to forests, then the full opportunity costs must be paid to local communities for their lost forest land or they will not participate and potentially even undermine the system given the chance, as seen in the Kilum-lijm conservation project (described in note 67 of the Cameroon case). Where entire forest communities' livelihoods are affected by REDD projects, benefits may be seen as a means of offsetting both opportunity costs and disruption to such inhabitants, providing an argument that in-kind project benefits like employment, community forest access, and local use of project infrastructure should also be considered.[73]

If benefits are distributed purely in terms of opportunity cost and designed primarily for effectiveness in halting deforestation, ignoring social equity concerns, such policies could backfire if perceived as unjust. Policy makers may also face a difficult decision between paying loggers to stop deforestation, which may result in greater short-term effectiveness, and paying local or indigenous communities customarily owning or maintaining at-risk forests that have never deforested.[74] If payments exclude law-abiding in favour of law-breaking citizens however, moral hazard could result, encouraging groups not deforesting to backlash or to begin deforesting in order to receive benefits.[75]

Key message: National legislation should ensure that payments to landholders and forest stewards are structured *ex post* or at intervals to ensure conditionality; include both units of carbon sequestered and opportunity costs of forest hectares preserved; and are flexible in order to reflect changing opportunity costs and international carbon prices. Provisions should guarantee that smaller landholders and local and indigenous communities are able, and have access to information explaining how, to bundle their projects to reduce transaction costs.

71 Rosenbaum *et al*., *supra* note 18, p. 35.
72 Scherr *et al*. (2006), *supra* note 40, pp. 46.
73 Rosenbaum *et al*., *supra* note 18, p. 45.
74 Skutsch, M. *et al*. (2007). "Clearing the way for reducing emissions from tropical deforestation". *Environmental Science and Policy* 10(4): 322–334, at 331.
75 Pagiola, S. (2008). "Assessing the Efficiency of Payments for Ecosystem services in Costa Rica". *Ecological Economics* 65: 712–724, as cited in Ogonowski, *supra* note 45.

3.5.5 Balancing benefits between local communities and outside investors

National governments will need to determine the proportion of credits or payments that will be shared with outside investors and project developers (either via direct revenue-sharing regulations if a nationally controlled regime or by taxes and royalties if a sub-national or private scenario). Such investors will be needed to play a key role in financing start-up costs and providing technical guidance, and governments will compete for their attention especially in the high-risk years of REDD pilot projects**.** Although such parties are generally sophisticated enough to require few benefit-sharing safeguards (foreign investors in particular), states may be better able to balance outsiders' and locals' compensation needs by offering an attractive investment climate to outsiders. That is, in lieu of exaggerating outsiders' revenue shares to the detriment of locals, states can attract outside investors by providing them with recourse to domestic courts and tribunals, and by protecting their investments from expropriation risk by joining international investment agreements. Additional means to attract investors include stabilizing land ownership and use regulations, and clarifying and better enforcing environmental laws.[76] In order to help link foreign investment and poverty alleviation goals with those of climate mitigation, states may create tax credits or other incentives for investors that join associations with smaller landowners and local and indigenous communities (principally where investors help build local capacity and transfer knowledge).[77] Such investment incentives could give poor or marginalized groups the chance to overcome their handicaps of relatively high start-up costs and weak technical capacity when applying for compensation for forest carbon sequestration.

The benefit-sharing mechanisms described in the case studies, and other national regulations surveyed, suggest local and indigenous communities may be at risk of not receiving adequate shares of benefits, especially in light of the high potential for corruption. In REDD pilot projects in Cameroon and Brazil, the majority of state revenues were allocated to government activities and government-run social programmes, with the smallest percentage going to direct landholder payments (10 percent or less). In contrast, carbon agreements in PNG to date have allocated 80 percent of benefits to landowners, with another 10 percent to developers and monitoring services each.[78] However, the PNG government has not confirmed benefit ratios for REDD programmes, and recent fraudulent carbon sales in the country underscore the need for strong safeguards on benefit sharing. Indonesia presents an exception to the general lack of clarity in national benefit sharing, as its July 2009 *REDD Revenue-Sharing Regulation* is the first of its kind in anticipation of the UNFCCC agreement on REDD, classifying forest carbon projects into ten types and varying payments accordingly.[79] Under the new regulation, national, municipal, and provincial government would receive 10–50 percent of carbon credit funds from forest projects, while local forest communities would receive 20–70 percent of such funds, with the ratio split between government and local communities dependent on the type

76 Scherr *et al*. (2006), *supra* note 40, pp. 48–49.
77 Robledo *et al*., *supra* note 39, pp. 21 and 23.
78 Baker & Mckenzie, *supra* note 20, p. 16.
79 *Regulation Regarding Procedures for Licensing of Commercial Utilisation of Carbon Sequestration and/or Storage in Production and Protected Forests,* Ministry of Forestry (P.36/Menhut-II/2009).

of forest.[80] For example, in "customary" forests, government would receive 10 percent, communities 70 percent, and developers 20 percent.[81] Despite the regulation's clarity, however, indigenous groups in Indonesia have contended that REDD will nonetheless disadvantage them.[82] Perhaps the most significant factor boding poorly for indigenous people there, as described in Chapter 1, is Indonesia's 1999 *Forestry Law*. There, the government classifies all forests as State-owned, excluding local and indigenous communities from ownership and allowing such groups use and access on customary forests only "as long as they are evidently in place and their presence is acknowledged".[83]

Key message: Laws and regulations should seek to attract outside investors by providing a stable investment environment rather than overly compensating such actors to the detriment of local participants. Benefit-sharing regulations should provide for public participation, and in particular, payments promised to local and indigenous communities should be safe from subversion via issues such as land ownership and access or corruption.

3.6 Conclusions

A challenge exists in developing national legal frameworks for REDD before Parties to the UNFCCC have agreed on a final international framework. This difficulty is true for benefit-sharing mechanisms in particular, given the overlapping possibilities for accounting and reporting levels (national, project, or hybrid), international payment channels (public fund or private market) and sub-national payment forms (government-regulated funding or carbon credits via private contract). Regardless of the details of a future international framework, however, the host of legal issues contemplated in this chapter demonstrate that countries will need to quickly develop legal, institutional and public financial management capacity to provide the necessary strong rule of law and safeguards for local and indigenous community forest stewards in particular. In addition, legislation incorporating clear, harmonized legal procedures and rules allowing for open participation among actors at sub-national and national levels is needed in order to ensure the successful national distribution of REDD benefits. Benefit-sharing issues are inextricably linked with legal issues relating to ownership, participation and permanence covered in other chapters, and as such must be treated in an integrated fashion by policy makers. Ultimately, clarity in national laws for benefit sharing will play a pivotal role in successfully defining and allocating benefits among sub-national actors, thus favouring the permanence of carbon emissions reductions and attracting long-term finance and investment in national REDDs.

80 *Ibid*. , Appendix III, Table N2JL.

81 *Ibid.*

82 Forest Peoples Programme *et al*. "Request for further consideration of the situation of indigenous peoples in the Republic of Indonesia under the early warning and urgent action procedures (Seventy fifth session of the Committee on the Elimination of Racial Discrimination)". Letter to Mr. Torsten Schackel, Secretary, UN Committee on the Elimination of Racial Discrimination, 29 July 2009.

83 *Basic Forestry Law (No.41/1999),* Article 67, as cited in Cooke, F.M. (Ed.) (2006). *State, communities and forests in contemporary Borneo*, p. 91. Asia-Pacific Environment Monograph 1. Canberra, Australia: The Australian National University E Press.

4 Additionality and Permanence

Gavin Doyle*

4.1 Meeting the preliminary hurdle of additionality

4.1.1 Introduction

Achieving additionality is a fundamental requirement for any REDD project. That is to say, a project must generate emissions reductions that are additional to what would have happened in the absence of an intervention and the carbon revenues attributed to it.[1] The achievement of additionality has been required under Article 12 of the Kyoto Protocol for all CDM projects, and it can be assumed that such a requirement will be extended to REDD contracts.

Examination of the particular context will be necessary in assessing additionality. For example, if logging concessions exist between the government and a logging company, this may indicate that a REDD project would provide the funding needed to avoid potential deforestation by incentivizing that company to avoid logging activities. A history of deforestation in the region would also legitimize a REDD project. Conversely, existing indirect government support for an avoided deforestation project, such as tax breaks, subsidies, or cheap credit, may entail that pure additionality is not being achieved, as the project's goals are already being funded to some extent.[2] Similarly, if the land is subject to national protected area (PA) legislation, this may obviate the need for international funding, as the result has already been achieved, and the forest is already *de facto* protected. This however depends on whether the legislation is adequate and systematically enforced.[3] Therefore, an examination of land title, logging concessions, PA legislation and government legislation regarding forested areas is necessary to comprehensively address additionality.

The corollary to the additionality requirement is that countries with high forest cover but historically low deforestation rates (HFLD) due to pre-existing sustainable forestry legislation may be excluded from REDD benefits by strict application of the additionality rule. In Guyana, records indicate that strong sustainable forest practices resulted in no net loss of forest cover between 1990 and 2005.[4] For example, the Kaieteur National Park was established in 1930 as a protected area, and resource

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1 The concept stems from project-based mechanisms under Art. 12 (5) (C), and Art. 6 of the Kyoto Protocol, *see* Protocol to the Framework Convention on Climate Change (Kyoto), 37 ILM (1998J) 22, in force 16/02/05.

2 Ogonowski, M. *et al.* (2009). "Utilizing Payments for Environmental Services for Reducing Emissions from Deforestation and Forest Degradation (REDD) in Developing Countries: Challenges and Policy Options". Washington DC: CCAP.

3 *See* Box 4.1 for further discussion.

4 Office of the President, Republic of Guyana. (2008). "Creating incentives to avoid deforestation". In Guyana, the rate of deforestation is put at 0.1–0.3 percent per year.

extraction since then has been prohibited.[5] From a strict application of the additionality rule, Kaieteur should be excluded from receiving REDD benefits, as the forest is already protected. In a similar vein, the legislation establishing the Guyanese Iwokrama reserve of 360,000 hectares of tropical forest stipulates that 50 percent of the reserve area is to be set aside for "sustainable utilization" with 50 percent designated as a wilderness reserve.[6] As Iwokrama is exempted from becoming a state forest under the National Forest Bill, and only sustainable use allowed thereon, no mining or other extractive industries can operate there.[7] Once again, a strict application of the additionality rule would appear to preclude Iwokrama from being eligible under a REDD framework.

4.1.2 Does the project generate "additional" emissions reductions?

Bearing in mind the theoretical prerequisites for additionality described above, how is this put into practice? A significant hurdle lies in the assessment of government legislation concerning protected areas and deciphering whether a forest was or is actually destined for deforestation. This requires an assessment of each project in detail, in particular its former land uses, its present land use, national or regional legislation governing the uses allowed thereon, existing concessions, and relevant title to the land. However, such considerations beg the questions of what stage of development a logging concession must be in order to be characterized as additional, and conversely, what threshold for domestic sustainable forest legislation precludes the need for REDD payment assistance? For example, Guyana has recently prepared draft legislation to create a national PA system, which is expected to encompass payments for ecosystem services such as carbon (although this is currently delayed pending the outcome of an international REDD mechanism). In Cameroon, the procedure for acquiring a forest concession involves several stages of application including a public call for tender and a resulting inter-ministerial grant to the successful bidder. A provisional three-year forestry concession is then granted, and upon its expiry, the same party can apply for a permanent exploitation contract.[8] At what stage then should lawyers decide that a forestry concession applies to a given acreage for additionality purposes, and should the tendering stage be considered? Moreover, why should PA legislation as in the case of Guyana remove it from REDD funding consideration (for want of additionality), when a Cameroonian forest concession tender results in project approval? The CDM Board's "step-wise approach" tool for the assessment of additionality for A/R activities may provide some guidance to treatment of additionality under a REDD framework, as shown in Box 4.1.[9]

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5 *Kaieteur National Park Act CAP 20.02.*

6 The *Iwokrama International Centre for Rain Forest Conservation and Development Act* 1996.

7 Clause 3, *Forests Bill.*

8 *Decree No.95-531-PM* of August 23, 1995 to determine the conditions of implementation of forestry regulations.

9 Annex 17 A/R Methodological Tool "Tool for the Demonstration and Assessment of Additionality in A/R CDM Project Activities (Version 02)". *See further* "Clarifications on procedures and documentation which need to be used for the renewal of a crediting period", Annex 7 to EB report, 8/7/2005. Interestingly, if existing regulations are "systematically not enforced", and non-compliance is widespread, the existence of such legislation still may not preclude additionality being attributed. Existing land uses, or land uses formerly existing since December 31, 1989 are credible. Note further high capital intensity for a potentially long-term profitable project may be an impenetrable barrier requiring some outside assistance in the form of REDD benefits.

Box 4.1 CDM Board "step-wise approach" tool for assessment of additionality for A/R activities

Step one: Identification of alternative land uses: This refers to "realistic and credible" land-use scenarios in the absence of the CDM activity (e.g., continuation of a pre-project use or existing A/R project). Investigations into land-use records and field surveys, and whether forestation occurred as part of a legal requirement is pertinent. Credible land uses must be consistent with enforced mandatory applicable laws and regulations, and these must have legally binding status. As such, general policy statements would not qualify a land use as "credible". If alternative land uses exist, the project moves on to step 2.

Step two: Investment analysis to determine that the proposed project activity, without the sale of temporary/long-term certified emissions reductions (CERS), is economically less attractive than at least one other land-use scenario. In this regard, see, for instance, Guyana's Income Tax Act which allows a developer to gain a tax reduction for the expenditure of clearing trees for development.

Step three: Barriers analysis to determine whether the proposed project activity faces barriers that both:

- Prevent the implementation of this type of proposed project activity; and
- Do not prevent the implementation of at least one of the alternative land-use scenarios.

Examples include lack of access to credit or international capital markets, lack of infrastructure, lack of knowledge, local ecological and social conditions, lack of skilled labour force, land ownership and right entitlement problems. Anecdotal evidence can be provided of such conditions.

Under Ghana's Timber Resources Management (Amendment Act) 2002 (Act 617), a timber concession stipulates a requirement to afforest 10 hectares for every square kilometre harvested. An A/R project that assists in fulfilling this requirement could be classified therefore as additional, if there is a lack of capacity proven on the part of the concession holder to fulfil this legal requirement.

Step four: Common practice analysis: This is the final step. An analysis of similar activities that have been implemented previously or are currently underway must be provided. If none exist, the project is considered additional. If they do exist, the presence of essential distinctions between them (such as tax incentives afforded to one activity that are not afforded to the other) may provide a back door to additionality certification.

Note: under CDM A/R guidelines, changes in national or sectoral regulations between two crediting periods, if binding, will necessitate a review of project baselines at the start of the new crediting period, and if necessary, a review of the project baselines.

Source: Annex 17 A/R Methodological Tool "Tool for the Demonstration and Assessment of Additionality in A/R CDM Project Activities" (Version 02).

In the Juma Reserve Protected Area in Brazil, the documentation for its establishment stated it was explicitly for the commercialization of environmental services through the sale of carbon sequestration credits. The Juma Reserve was subsequently certified as additional by an independent third party in accordance with defined criteria specified by the Climate Biodiversity and Community Alliance (CCBA), an organization providing certification for voluntary CER projects.[10] By such a proactive manner, PA legislation may intentionally avoid barriers to achieving additionality certification.

The concept of additionality is inextricably linked with the critical issue of baseline development. A baseline is the emissions reference point for a given area, which denotes the extent of GHG emissions that would have been emitted without REDD activities (i.e., "business as usual", or BAU). The baseline thus allows for the formation of a contract setting the terms of compensation to be offered for tons of carbon sequestered beyond BAU.

Key message: Due diligence regarding pre-existing domestic legislation must be conducted to ensure that additionality is ensured in any REDD contract. National protected areas legislation may not preclude additionality if it is explicitly stated in that legislation that payment is expected for this environmental service.

4.2 Baseline development

4.2.1 How are baselines determined

Coupled with additionality, a reference level resulting in environmentally effective emissions reductions is of paramount importance. How the reference level is set will determine if REDD payments are subsidizing non-additional reductions, or if a true emissions reduction has occurred.

In order to set an adequate baseline from which to initiate REDD payments, accurate and transparent data must be furnished, which often may not be available in REDD candidate countries. Either historical deforestation rates or future deforestation projections may form the basis of baselines, both of which involve complicated methodologies and necessarily depend on reliable data for their validity.[11] The progression from scientifically uncertain baselines to legally secure contracts for

10 TÜV SÜD. (2008). "CCB Validation Report. The JUMA Sustainable Development Reserve Project".

11 The use of satellite imagery has some technical limitations limiting its effectiveness, as well as practical cost concerns, which preclude some developing countries from using it.

avoided deforestation can present difficulties.[12]

Under the CDM for A/R activities, an approved baseline and monitoring methodology had to be selected, which was then approved by the CDM Executive Board.[13] For avoided deforestation, one formula involves the use of national "historical deforestation" rates as a baseline (e.g., the aggregate of the last decade), whereby reduction of the deforestation level below that baseline would generate credits. However, this formula is based on the premise that past conduct is reflective of future behaviour, which appears to conflict with current forest development theories.[14] Furthermore, historical deforestation trends imply that countries such as Papua New Guinea (PNG) and Indonesia that have engaged in heavy deforestation in the past will be able to lower their deforestation rate slightly and gain credits, while a country that has historically protected its forests like Guyana, or which has a low deforestation rate such as Cameroon, will be excluded from such rewards. As such, the use of a historical baseline may result in a "hot air" target (i.e., one that is easily met and results in large amounts of non-additional emissions credits flooding the market) for low forested but high deforestation rate (LFHD) countries to reach.

There is also a danger that an impending REDD mechanism may incentivize countries to avoid taking domestic measures to avoid deforestation, in the hope that they will be paid for by foreign investors if they wait until a REDD scheme is established. This delay is further motivated by the legitimate fear that application of the additionality criteria will preclude the areas subject to any domestic measure from the REDD benefits. In this regard, Guyana's sustained delay in moving ahead with a national PA system can be understood.

There is also the possibility of a state rapidly increasing its deforestation levels in order to benefit from a higher baseline at the start of the next commitment period (CP). This potential activity, coupled with delayed implementation of domestic legislation, would be an inauspicious beginning for a mechanism intended to slow deforestation.

A possible "stop-gap solution" would be to allow emissions reduction activities undertaken before the start of the next CP to be eligible for credit therein.[15] This could incentivize emissions reductions projects now, and ensure that passive governance resulting in increased deforestation does not occur in order to profit from an impending mechanism.[16] As a comparison, A/R activities occurring

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12 Reference levels must meet the criteria of "effectiveness, efficiency, transparency, simplicity and consistency, while ensuring environmental integrity and fairness. Any approach … should be flexible to ensure broad but voluntary participation by developing countries" (*see* UNFCCC SBSTA "Report on the expert meeting on methodological issues relating to reference emission levels and reference levels", FCCC/SBSTA/2009/2 14 May 2009, at p. 6).

13 Manguiat, M.S.Z. *et al.* (2005). *Legal Aspects in the Implementation of CDM Forestry Projects*. IUCN Environmental Policy and Law Paper No.59. Gland, Switzerland and Cambridge, UK: IUCN.

14 The "forest transition theory" (FTT) reasons that initially, a country is characterized by highly-forested lands and low deforestation. As development occurs, deforestation increases at a rapid rate and then slowly declines, at which point forest cover slowly recuperates. *See* Angelsen, A. (Ed.) (2008). *Moving Ahead with REDD: Issues, Options and Implications.* Bogor, Indonesia: CIFOR.

15 PNG have supported credit for early action generally, *see* OCCES. (2009c). "PNG Views on Reference Emission Levels and Reference Levels for REDD. Expert Meeting, Bonn, Germany, 23–24 March 2009", at p. 15.

16 Fry, I. (2008). "Reducing emissions from deforestation and forest degradation: Opportunities and pitfalls in developing a new legal regime". *RECIEL* 17(2): 166–182.

before the start of the first crediting period (threshold after 1 January 2000) were deemed eligible for CDM crediting from the start of that period. Once again however, the determination of baselines assumes importance, and definitional thresholds will need to ensure equity among participants and legal certainty in their effects. How much of a country's 'early action' activities will be eligible for carryover? At what level should the reference level be set? How does this interrelate with additionality, assuming that not all avoided deforestation activities are enacted because of the proposed REDD framework? These legal questions must all be answered if "early crediting" is pursued. Furthermore, legal conditions must be attached in order to ensure that if leakage occurs, or permanence is put at risk, liability is assumed by one of the parties for the carbon lost.[17]

Certain "equitable balancers" have been proposed, including a deforestation adjustment factor (as in PNG) and an "economically rational" deforestation baseline (as in Guyana), both of which reflect the problems facing certain countries with regard to the use of a historical baseline.[18] These proposals are outlined in Table 4.1 below.

A forward-looking baseline (i.e. a projected baseline estimating future deforestation levels) could also be used. (Indonesia has recently endorsed the adoption of either the historical trend or future development scenario.[19]) Actual emissions are compared with the projected baseline after the CP, and credits or debits are thus assigned. In the Juma Reserve in Brazil, the project simulates a BAU baseline that predicts deforestation of 75.4 percent of the reserve by 2050, based on extensive plans for increased road building and agricultural intensification.[20] Prediction, however, of the importance and impact of future factors such as energy security, progression to modern fuels, and commodity prices (relating to the opportunity cost of avoided deforestation) is difficult and based upon uncertain data.[21] Such national circumstances should be taken into account, in order to address perverse eventualities that attribute benefits to parties who have historically deforested the most. Thus, it is unclear whether past forest treatment is a robust indicator of future deforestation.

17 This may involve cancelling the right to carry over credits into the next commitment period.

18 OECD Environment Directorate and International Energy Agency. (2003). "Forestry projects: lessons learned and implications for CDM modalities". OECD and IEA Information Paper.

19 *Regulation of the Ministry of Forestry of the Republic of Indonesia* Number: P.30/Menhut-2/2009 on the implementation procedures of reducing emissions from deforestation and degradation, chapter 1, (13).

20 The Juma Sustainable Development Reserve for REDD, hereinafter known as "the Juma Reserve."

21 UNFCCC SBSTA Report, *supra* note 12, at p. 7.

Table 4.1 National "equitable balancer" baseline proposals [22]

Country	Proposal	Rationale
Papua New Guinea	**Development correction factor:** This discounts the baseline resulting in a lower or higher emission reference level.	The proposal accounts for socio-economic factors affecting the historical baseline, respective capabilities, and relevant other national circumstances. Practically, it allows HFLD countries to use a higher reference level, recognizing the need for economic growth which will result in deforestation.
Guyana	**'Economically rational' deforestation baseline:** A projected baseline is used to map the path of a country if an economically rational deforestation policy were chosen. As a result, the market failure that would otherwise fail to attach value to Guyana's forest is corrected by accounting for the opportunity cost of avoiding future deforestation both in economic terms to Guyana and in the forest's economic value to the world.	As Guyana is approximately 85 percent forested, the use of a historical baseline would ensure Guyana is isolated from REDD benefits due to its historically responsible forestry practices. Furthermore, the country is at an early stage of its forest transition, implying that deforestation will rise sharply in the future and tail off after economic development.

Key message: A baseline is the emissions reference point around which REDD contracts will be constructed.

4.2.2 How are timeframes established

The formulation and methodology for REDD baselines take on added significance depending on the length of contract which is concluded. If for example, a historical baseline is used for a carbon project, and the project timeframe is 50 years, then deforestation can legitimately continue at a slightly lower rate than before, while the project earns credits and appears to be a GHG reduction scheme. If the baselines for a given land area prove illusory, a long-term contract would continue to assume a false projected carbon pathway while actually allowing for release of many tons of stored forest carbon over that period. Review periods, either explicitly stated in the carbon contract, or mandated by domestic law, can be used to address that concern by requiring periodic review and analysis of baselines, their efficacy and the carbon reduction actually made. Table 4.2 illustrates the timeframes envisaged by two of the countries analyzed.

22 Sources include Angelsen, A. *et al.* (2009). *Reducing Emissions from Deforestation and Forest Degradation (REDD): An Options Assessment Report*. Prepared for The Government of Norway. *See also* OCCES (2009c), *supra* note 15. *See further* Office of the President, Republic of Guyana, *supra* note 4, p. 10. In Guyana, high-level estimate of EVN indicates a value of US$4.3–24.3 billion, depending on the carbon price. EVN is calculated by taking into account the value of timber, and post harvesting activities such as mining and agriculture.

Table 4.2 Exampled of REDD baseline timeframes[23]

Country / Project	Project timeframe	Legislation	Review
Indonesia	30 years, extended in accordance with regulations (unspecified therein)	Art. 13 2009 Regulation	In accordance with the regulation (un-specified)
Brazilian Juma Reserve	44 years, with a review of the baseline in 2016	Law for the Amazonas State Policy for Climate Change	First crediting period starts in 2006 and ends 2016

4.2.3 What types of forests and categories of land use may be used in REDD projects

As mentioned earlier, the pre-existence of PA legislation will require legislative flexibility in order to ensure equitable participation and sharing of the benefits of REDD payments. There must be a universally accepted legal definition of "forest" and "deforestation" in order to ensure uniformity of treatment and comparability of data. In this regard, definitional discrepancies between what the UNFCCC classifies as a forest (including plantations) and what a country so classifies must be rectified, in order to prevent arbitrage between jurisdictions that are at variance in their legal definitions.[24] There may, however, be a possibility of categorizing forest types in order to account for their varying GHG mitigation properties (e.g., boreal, tropical). Whether landholders should be required to hold certain qualifications, the threshold for additionality (i.e., that projects move to an even more environmentally-beneficial activity), and the minimum project size required are further legalities that must be addressed.

The scope of a definition on REDD will have an impact on monitoring, reporting and verification (MRV), because the wider the scope and ambit of the definition the more ambiguity there is in the interpretation, with a resulting uncertainty in the effectiveness of the regime from a legal, environmental and potentially even a commercial point of view. Credits gained must be in exchange for avoided deforestation, or else additionality is jeopardized and climate change mitigation goals are not met.[25] The aim must be to ensure close correlation between emissions reductions and earned carbon credits. Whether the current UNFCCC Marrakech Accord definition of "forest",[26] as characterized

23 Fundação Amazonas Sustentával (Amazonas Sustainable Foundation). (2008). "The Juma Sustainable Development Reserve Project: Reducing Greenhouse Gas Emissions from Deforestation in the State of Amazonas, Brazil. Project Design Document (PDD)".

24 Baker & McKenzie , Covington & Burling LLP. (2009). "Background Analysis of REDD Regulatory Frameworks". Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Note this is an issue which has surfaced in the recent Indonesian legislation, *infra* note 37.

25 *Ibid.*

26 FCCC/CP/2001/13/Add.1 – "Forest" is a minimum area of land of 0.05–1.0 hectares with tree crown cover (or equivalent stocking level) of more than 10–30 percent with trees with the potential to reach a minimum height of 2–5 metres at maturity *in situ*). *Supra* note 1.

in terms of canopy cover rather than biomass content, adequately deals with degradation in REDD under the deforestation definition (forest removal in spatial terms) is debatable. It is arguable that it fails to distinguish between plantations and natural forests, with the result that natural forests that are severely degraded or converted to plantations technically remain classified as forests. Furthermore, whether deforestation should encompass temporary sequestration of carbon is another legality to be resolved by the UNFCCC.[27]

4.2.4 What standards are used to measure the project's benefits

Box 4.2 presents the standards applied to the Juma Reserve project. While not representative of a global standard, it illustrates a good reference point for assessing the parameters used to appraise a project's benefit. At present, in the absence of a global framework on REDD, guidance on standards and methodology must be sought from voluntary standards, such as the Voluntary Carbon Standard (VCS) and the CCBA standard, which underpinned the Juma Reserve carbon sequestration certification.

Box 4.2 Standards used to appraise the Juma Reserve Project in Brazil[28]

The recently created JUMA Reserve was certified (with gold status) by the German audit company TUV SUD, and was designed to ensure compliance with CDM A/R project requirements, including, inter alia:

- Art 12. of the Kyoto Protocol (concerning additionality);
- COP decisions in relation to the CDM;
- Specific guidance and decisions by the CDM Executive Board;
- Guidelines for Completing the Project Design Document (CDM-PDD) and the Proposed New Baseline and Monitoring Methodology (CDM-NM);
- The applied approved AR CDM methodology.

In addition, various other factors are considered, including:

- Legal status of project, land tenure, project projections, project designs and goals, and use of baselines;
- Net positive climate impact, leakage, site monitoring;
- Net positive community impact, off-site community impact, community impact monitoring, best practices in community involvement;
- Net positive biodiversity impacts (including monitoring), water and soil enhancement, use of native species.

27 Skutsch, M. *et al.* (2007). "Clearing the way for reducing emissions from tropical deforestation". *Environmental Science and Policy* 10(4): 322–334. *See further* Sasaki, N. and Putz, F.E. (2009). "Critical need for new definitions of "forest" and "forest degradation" in global climate change agreements". *Conservation Letters* 2: 226–232.

28 TÜV SÜD, *supra* note 10.

4.2.5 Dynamics between national, sub-national and project-level activities

In the event of national or regional baselines being developed, there will be implications for accounting purposes and environmental effectiveness. In particular, there is considerable debate on the merits of national, regional or project baselines, and the inter-relationship between state and sub-sector levels.

A national approach to baselines would reward developing countries upon proof of deforestation reduction below a certain baseline. Theoretically, a national baseline makes practical sense, due to lower transaction costs, easier international market access, and clearer national comparability.[29] If integrated into a regional approach, whereby countries agree to cooperate and work jointly under a regionally-united baseline framework, or a globally negotiated baseline with one target divided into sectors, national baselines would have the benefit of being *prima facie* well placed to tackle carbon leakage.[30]

However, whether including additional and non-additional projects in one national baseline affords adequate transparency and environmental effectiveness for each individual project is debatable, as available accurate data may prove a significant constraint.[31] Furthermore, the use of national baselines raises the issue of benefit sharing, and whether sub-national activities that actually reduce emissions will be rewarded if net state emissions from deforestation levels exceed the national baseline.[32]

Under a sub-national approach, baselines are set for individual projects. This may be attractive to governments lacking the capacity to put in place an accurate national baseline.[33] A project-specific baseline, according to defined methodology, may safeguard additionality and environmental effectiveness. Additionally, project baselines could help ensure permanence of carbon sequestered by facilitating equitable benefit sharing, thus providing incentives to parties previously engaged in deforestation to follow a conservation path instead.[34] Non-market mechanisms in the form of local trust funds could also ensure that rent-seeking national government officials do not prevent funds from being allocated to communities on the ground.[35]

Indonesia has recently produced a REDD Regulation which stipulates that baselines be formulated at project, regional and national levels. [36] The national reference level is stated to be the guide for project reference levels, and consistency *inter se* has been mandated.[37] The national emissions level is to be set by the Ministry for Forestry, sub-national reference levels are to be set by the local government (city or province) and verified with the national emissions reference level, while REDD project reference levels are to be set by the project proponents and verified with the sub-national

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29 Fehse, J. (2008). "Forests and carbon trading: Seeing the wood and the trees". OECD Observer No. 267, May–June 2008, at p. 42.
30 Skutsch *et al., supra* note 29, p. 324.
31 *Supra* note 1.
32 Streck, C. (2008). "Opinion: Snake Oil for the Mind. National Baselines for Reducing Deforestation".
33 Fry, *supra* note 16.
34 Fehse, *supra* note 32.
35 Fry, *supra* note 16.
36 *Regulation of the Ministry of Forestry of the Republic of Indonesia, supra* note 19, Appendix 5 (A) 1.
37 FCPF R-Plan Template Working Draft Version 2, Indonesia May 2009.

and national emissions reference level.[38] Currently, it does not appear clear from the Indonesian legislation how the relationship between the sub-national baseline and the guiding national baseline will manifest itself, especially if several projects are bundled as envisaged by the legislation.[39] Furthermore, there is no guidance on how a country allocates credits to sub-national projects, and no mention of state liability regarding compensation of project participants should Indonesia fail to meet its national baseline target.[40] This is further clouded by the potential use of different baseline methodology (historical and future) at various sub-sector levels. The extent of autonomy given to regional governments may necessitate a detailed examination of forest management, royalty, tax, timber concessions and any other laws that could jeopardize the national/sub-national legal consistency. In sum, consistent baseline reference methodologies across various implementation levels will be fundamental in ensuring accurate national accounting and avoiding carbon credit accounting complications.

Nonetheless, the trade-off in using standardized baselines for all sub-national projects, especially for federal systems like Brazil or Indonesia, is that sub-national projects may have particular circumstances that require consideration (such as a good forest conservation history). If the use of historical baselines were to be mandated on a national scale, it could effectively result in a certain regions being excluded from that REDD regime. Harmony and consistency in legal approaches at national, regional, and local level will facilitate the coordinated and efficient deployment of REDD projects and thus be of commercial importance. If REDD follows a market-based scheme under the UNFCCC, investors will reward countries able to align their regulatory structures to facilitate accurate, transparent and timely transfer of CERs to market.

Key message: If national baselines are used, domestic legislation must ensure that actors at sub-sector level are compensated for deforestation efforts achieved. National and sub-national legal consistency is of paramount importance.

4.3 Ensuring permanence: Avoided leakage, possible safeguards, liability

A central tenet to any carbon mitigation project is that it achieves permanent emissions reductions. Sequestered carbon is only of benefit to mitigating climate change so long as it remains sequestered, and human or natural intervention causing the release of stored carbon undermines previous carbon sequestration efforts.[41]

In addition, carbon leakage, the "unanticipated loss of net carbon benefits as a consequence of the implementation of the project activities", may nullify any benefits gained from a REDD regime by

38 *Regulation of the Ministry of Forestry of the Republic of Indonesia, supra* note 19.
39 FCPF R-Plan Template, *supra* note 40, at p. 49.
40 Baker & McKenzie, *supra* note 26.
41 Streck, C. and Scholz, S.M. (2006). "The role of forests in global climate change: whence we come and where we go". *International Affairs* 82(5): 861–879.

driving deforestation to areas outside the regime.[42] Therefore, for a carbon contract to have long-term security (assuming temporary CERs (tCERs) are not used), due diligence must be performed into the capacity of the landholder to ensure carbon remains sequestered.[43] Furthermore, certain national mechanisms that purport to safeguard the permanence of a carbon sequestration project can be worked into a contract. These are discussed in Section 4.3.4.

4.3.1 Land title and permanence

Diligent investigation into land titles will be necessary in order to ensure long-term permanence, as ownership of the carbon contained in the trees must be ascertained, and relevant national law concerning landowners' rights and property entitlements must be fully explored.[44] In the countries analyzed on this issue, no clear legal distinctions were found. The extent of recognition of customary land rights and the means of enforcement of these rights will have significant effects on permanence. Specifically, in some countries (e.g., Cameroon), recognition of such rights is poorly developed, the means by which to assert customary rights are complicated and expensive, and the capacity for forest dwellers to participate in any REDD contract is diminished.[45]

The transferability of carbon rights to an intermediary or agent will also have implications for permanence, notably where there is a lack of capacity to participate in an emissions credit sales agreement, restrictions on the transfer of CERs, and domestic legislation on leasehold by foreign participants. In particular, harvesting, mining, and timber concessions must be examined to ensure that contradictory prior legal entitlements do not exist that may cause permanence problems as the project progresses. Similar inquiries should be made into whether logging companies abide by the parameters of their concessions. If a contradictory right does exist, domestic legislation should be analyzed regarding land purchases, leaseholds, restrictive covenants, or easements with prescribed abandonment dates in order to assist project deployment and continuance.[46]

In the countries analysed, it was particularly evident that long-term permanence of a REDD contract may be put at risk by legislation that gives relevant government forestry departments no veto over prevailing mining or petroleum interests. This may lead to conflict between a REDD project and a mineral exploration initiative. This type of legislation needs to be amended before any serious long-

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42 Auckland, L. *et al.* (2003). "A conceptual framework and its application for addressing leakage: the case of avoided deforestation". *Climate Policy* 3: 123–136, at pp. 124–125 (identifying two types of leakage: primary, such as activity shifting or importing the necessary timber from elsewhere; and secondary, such as a rise in timber prices due to constrained demand which in turn stimulates supply, or a rise in commodity prices).

43 Baker & McKenzie, *supra* note 26, at p. 28. Examples put forward include imposing a staged release of credit payment upon proof of contractual performance, or mandatory maintenance by means of a contractual clause.

44 Streck, C. and O'Sullivan, R. (2007). "Legal tools for the ENCOFOR Programme", at p. 12.

45 In the absence of specific REDD legislation in Cameroon, Law No 94-01 of January 20, 1994 applies, which provides only paltry sums to the local population for the exploitation of forests. In addition, customary logging rights (for personal use) can be removed in the interest of forest exploitation, albeit for compensation (Art. 26(2)). However there is no interparty consultation on the amount, which is determined solely by the Ministry for Finance (Law No 96/237/PM of April 10, 1996 fixing the modalities of the functioning of the special fund for forestry, wildlife and fisheries).

46 Streck and O'Sullivan, *supra* note 47.

term REDD project can be begun. Moreover, compulsory acquisition of customary land by the state for activities related to economic development would not serve to appease the concerns of investors as regards the stability of a REDD contract in such a country. In certain countries, investment in avoided deforestation projects on indigenous lands would appear *prima facie* best placed to assure the safety of investment, as specific powers to veto mining interests exist. However, the lack of legal capacity on the part of indigenous landowners to transfer or assign any interest in these lands will preclude any investment.

The apportionment of benefits under a REDD contract will have permanence implications, especially when it comes to a contract that is dealing with carbon sequestration on indigenous lands. Put simply, landowners must be adequately incentivized to ensure project permanence. Depending on how land title is assessed at local, provincial, and national levels, there may be discrepancies in the benefit-sharing process that could damage long-term permanence. For example, if one regional law recognizes pre-existing customary land title and ensures that benefit sharing occurs in accordance with their customary land rights, while another regional law lacks such a mechanism, deforestation may result, as parties that receive no compensation seek an alternative form of revenue. As such, it is fundamental in any REDD mechanism to ensure uniform treatment of customary landowners across regional and international boundaries to ensure REDD regimes have comparable effects on local, national, and international scales.[47] As a result, the potential for project leakage occurring at a project or regional levels will be mitigated.[48] In this regard, legislation providing for the establishment of the Juma Reserve extends the same forest allowance benefits to dwellers inside forests as those in the outer project buffer zone.[49] Given transboundary sovereignty and State border issues, however, far greater challenges may be foreseen in addressing leakage at national and international levels.[50]

There is a possibility that REDD projects could be initiated by bundling together various small-scale projects into a larger regional entity, as has been envisaged in recent Indonesian legislation.[51] However, whether this merely streamlines applications for project applicants, or alters the legal ownership of the REDD project remains uncertain from the legislation. Bundling projects could also occur through an appointed intermediary, to whom the right to trade credits and sell them on the community's behalf will have been delegated. In this regard, a thorough investigation of individual projects making up the whole must be conducted, in order to ensure that benefit flows from the sale of credits extend to those entities who have foregone other income generation.[52]

Key message: Investigation of land title and concurrent conflicting interests must be fully explored prior to signing a REDD contract.

47 Note the level of benefits to be derived from a particular project obviously depends on other factors, such as project/national baselines, type of forest, and length of contract. For information on the "causal chain" of leakage, *see* Angelsen *et al., supra* note 22.

48 Auckland *et al., supra* note 45.

49 Fundação Amazonas Sustentával, *supra* note 24.

50 Dooley, K. *et al.* (2008). "Cutting Corners: World Bank's forest and carbon fund fails forests and people".

51 *Regulation of the Ministry of Forestry, supra* note 19, Art. 3.2.

52 Auckland *et al., supra* note 45.

4.3.2 Are credits temporary or permanent

The nature of REDD credits under a future framework is still unclear, and in particular whether REDD credits are envisaged as permanent or if periodic expiry and renewal will be required. Some guidance may be gained from previous treatment of this issue under the CDM for A/R projects in the first CP (2008–2012), as presented in Box 4.3.

Box 4.3 A/R projects under the CDM in the first CP[53]

CDM A/R projects in the first commitment period (CP) of the Kyoto Protocol (including agro-forestry, mixed industrial plantations and forest landscape restoration projects) generate tCERs and long-term CERs (lCERs). TCERs are used with an expiry date (the end of the first Kyoto CP), but with the potential for renewal upon verification that the underlying biomass is still in existence. As such, the liability for emissions compensated in the first CP will manifest itself once more in the second and all subsequent CPs. LCERs can be valid for up to 60 years, but must be re-verified every five years, and ensure that the CER remains with the buyer for the entire term of the project. Both have to be discounted (as opposed to full-value CERs from GHG mitigation projects) to take stock of permanence issues, liability for lost carbon, and the cost associated with re-verification. As such, they both reflect the fact that A/R projects under the CDM only temporarily store carbon. A/R CERs cannot be carried over for compliance in subsequent CPs, and they may only contribute toward a maximum of one percent of Annex 1 countries' emissions. While the EU Emission Trading System (ETS) excluded A/R projects in the first trading period (2008–2012), Directive 2009/29 EC supports the development of a financing mechanism stimulating investment in A/R and REDD for future CPs.

Depending on the form of the carbon credit, permanence of carbon sequestered may be in jeopardy in REDD contracts. An lCER project requires the seller to ensure that the carbon will be effectively stored for the lifetime of the contract. The inherent risk of investing in long-term contracts from a buyer's perspective is accompanied by an understandable reluctance on the part of sellers to guarantee effective sequestration for a long period, especially if liability for lost/leaked carbon is assumed. While it does ensure an element of continuity and certainty is instilled in the contract, and may encourage the buyer to become directly associated with the projects' sustained permanence, a tCER has the benefit of flexibility, and the permanence fears of long-term projects are less acute. In sum, tCERs present less risk to carbon permanence.[54]

For sellers of carbon credits, one option is a forward contract, whereby a specified number of credits are delivered to the buyer at a specified point in the future. Otherwise, recourse to the carbon spot market is possible if CER prices are expected to gain value in future trading, or if multiple buyers are sought. However, concern has been raised about the use of lCERs traded on spot markets, due to

53 Manguiat *et al.,* supra note 13. *See further* Streck and O'Sullivan, supra note 47, at p. 12; and Emmer, I.M. and Kägi, W. (2007). "The Encofor Checklist for CDM A/R Project Developers", at p. 15.

54 Streck and O'Sullivan, *supra* note 47.

the lack of direct contact (both prior and during the contract) with the REDD project on the ground, and due to the limited relationship (in time and substance) between buyer and seller.[55]

If long-term credits are envisaged, there is the possibility of putting in place a discount factor to account for long-term uncertainty, and there will be a greater necessity for safeguards at domestic and international levels to ensure that carbon leaked is monitored and, if necessary, offset. In this regard, proactive legal rules governing allocation of responsibility, monitoring, and enforcement, implementation of safeguards, and assumption of liability must be developed.

Key message: Long-term credits present a greater contractual risk of non-performance to the seller of the carbon credits.

4.3.3 Monitoring and verification

The capacity for some countries to produce an accurate inventory of relevant sinks and sources before baseline development, and the capacity to further monitor deforestation, is hamstrung by lack of funds and institutional capacity. In Cameroon for example, the REDD pilot project only monitors one sector of forested lands, leaving the other sector (the non-permanent forest domain) susceptible to leakage impacts. The capacity to ensure logging companies abide by the terms of their concessions is also very low, as evidenced in PNG, where breaches of the Forestry Act result in deforestation of large areas of land outside the parameters of logging concessions.

The choice of baseline applicable to the REDD project will have MRV implications. While a regional or national baseline may *prima facie* involve a much larger monitoring mechanism, it should facilitate the monitoring of carbon leakage in a given region in a more accurate manner than under project level baselines.[56] In Indonesia, the national legislation stipulates "national accounting with sub-national implementation" but does not provide any substantive guidance on how this will be effectuated, in particular bearing in mind the diversity of geographical regions, the multiple drivers of deforestation, and national development priorities.[57] There is a fundamental need to ensure in any REDD contract that effective monitoring takes place to ensure that any reduction in emissions at a local level is translated into the national baseline registry.

4.3.4 Safeguards

There exists a plethora of options to ensure permanence in the event of leakage, domestically, internationally, and in the form of demand-side management (DSM). Furthermore, the choice of baseline could have implications for carbon leakage, with a national baseline a potential safeguard.[58]

As the proposed REDD projects may have a life greater than the five-year tCER for A/R projects outlined above, guarantees must be incorporated in the legal framework that carbon will be stored for

55 *Ibid.*

56 "Regional baselines" have been used in the Scolol Te project in Mexico in order to assist monitoring project leakage in a region. *See infra*, Box 4.5.

57 Forest Carbon Partnership Facility (FCPF) Country submitting the R-Plan: Indonesia. Date submitted (or revised): May 2009.

58 *See generally* OCCES (2009c), *supra* note 15.

the specified contract period. This could manifest itself in the form of a penalty on landowners for non-compliance with the REDD contract terms,[59] or even a periodic expulsion from CDM REDD funding opportunities. LCERs carry a greater risk for buyers, as they will necessitate a greater investment and the risk of losing such an investment will cover a longer period. This greater burden may translate into certain obligations (in the form of guarantees) on the part of the domestic landowner or an intermediary in order to safeguard the project's environmental integrity.[60] However, the nature of such guarantees by sellers and the capacity to engage in such guarantees under existing domestic law must be assessed. A risk assessment of the seller concerned could give a greater picture of permanence concerns.[61]

There is a possibility of using insurance mechanisms to safeguard a certain quota of deforestation credits. Self-insurance contracts may offer a certain degree of legal certainty, whereby sellers set aside more hectares for avoided deforestation than contracted, or international buyers purchase more hectares per CER.[62] In Bolivia, the Noel Kempff Mercado Climate Action Project has implemented community initiatives in the regional perimeter of the park to try and account for project leakage (see Box 4.4 below),[63] while the Juma reserve in Brazil provides for a project "buffer zone" of 10 kilometres around the perimeter (at least 494,318 hectares). In Juma, forest dwellers in this zone are also extended the REDD benefits as an incentive to conserve the area.

Box 4.4 Sub-national leakage considerations in the Noel Kempff Mercado Climate Action Project

In 1996, the Government of Bolivia and several partners undertook one of the world's first large-scale attempts at REDD: the Noel Kempff Climate Action Project (NKCAP). While the NKCAP has been praised for pioneering project methodologies used in many forest carbon projects today, it also reveals particular challenges in sub-national REDD methods for assessing leakage. The project's leakage analysis was divided into primary and secondary leakage. The former consists of deforestation from conversion of land outside the project area, and the latter of the effect of reduced timber supply from the NKCAP on timber markets in other areas. To monitor primary leakage, the project approach assumed that all primary leakage was caused by local communities in a 15 km buffer zone of the project. As communities received alternative livelihood benefits, it was then assumed land conversion activities had ended, and that primary leakage was thus nil. Furthermore, the project relied upon simulated-logging responses to various supply and demand variables, as opposed to remote sensing

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59 Baker & McKenzie, *supra* note 26.

60 For example pest control and fire prevention. Further clauses could include restrictive covenants, a requirement to purchase existing logging concessions, and a charge over the land. For further discussion *see* Streck and O'Sullivan, *supra* note 47.

61 *Ibid.*

62 Scherr, S.J. *et al.* (2006). *Developing Future Ecosystem Service Payments in China: Lessons Learned from International Experience,* at p. 47. Washington DC, USA: Forest Trends.

63 Auckland *et al., supra* note 45.

and ground-based monitoring to measure actual deforestation leakage, raising doubt as to the reliability of the figures. Given the theoretical nature of the methodologies used and incomplete data, it is difficult to assess whether emission reductions were real, measurable, quantifiable and variable. Deforestation and forest degradation in areas outside the NKCAP in Bolivia or across the border into nearby Brazil appears to have neither been monitored nor accounted for by the project, raising doubt as to whether leakage was accurately quantified. Moreover, while the project generated offsets based on sub-national deforestation reductions, the national deforestation rate actually increased in percentage terms, raising further leakage doubts. This example demonstrates how more comprehensive monitoring, including both national and transboundary-level impacts, may better assess leakage from REDD projects.

Sources: Greenpeace (2009); The Nature Conservancy (2009).

In a similar manner to buffer zones, an insurance pool of REDD credits can be generated, which can be applied should a leakage event occur. Legal compliance with this insurance requirement and regular monitoring of the buffer zone will be needed to ensure that the insurance credits are still intact. In this regard, providing incentives to forest dwellers in the buffer zone may allay those fears, a scheme which has been implemented in the Juma Reserve. Of critical importance is whether to place the legal responsibility of self-insurance on the buyer or the seller, and what redress will be made available in the event of non-compliance. The general wish of some countries to have control over their REDD projects may justify legal responsibility for maintenance of the insurance buffer being allocated to the seller of credits, with some level of MRV support mobilized by the buyer. The VCS tool for non-permanence risk analysis and buffer determination defines a step-wise approach for determining the number of buffer credits a given project should set aside for insurance purposes.[64] Some inherent risks to long-term permanence such as unclear land ownership and use rights (Cameroon), potential for dispute, political and social instability, high opportunity costs (significant for Brazil, Guyana, Indonesia and PNG) and significant non-anthropogenic natural disturbances pose significant risks which assist in the buffer determination. Once the amount has been determined, the requisite carbon credits are withheld, not traded, and subject to future verification on the expiry of the crediting period. A good track record of withholding carbon may then allow for a release of a percentage of the buffer for sale, creating a further incentive for the project's environmental integrity. Depending on the project's permanence risk rating, the buffer requirement for subsequent periods may be reduced.

There is a further possibility for risk pooling buffer zones from several projects, in order to maintain a communal risk fund, to be used to address leakage events.[65] Contributions could be made on the basis of the number of hectares being used for REDD credit and a project "risk rating", with periodic reviews made at regular intervals to determine changes in contributions. This type of contractual arrangement could be applied to sub-sector projects in Indonesia, as bundling of projects is

64 Voluntary Carbon Standard. (2008). "Tool for AFOLU Non-Permanence Risk Analysis and Buffer Determination".

65 Angelsen, *supra* note 14, at p. 81.

specifically envisaged under the new legislation.[66] The potential for inequities due to perceived bad risk projects could be offset by subsidizing such projects and enabling them to attain insurance.

The use of a project-level discount factor on CERs (10 percent in the case of the Juma Reserve) could account for leakage by incorporating a certain degree of uncertainty into every REDD carbon contract which entails sale of CERs. However the transaction costs to this method could be considerable and may result in substantial delays or disputes between regions over the factor applied to their project. Furthermore, whether this will address leakage at a national level remains debatable.[67] Box 4.5 below presents further options available at the international level to counteract the causes of leakage.[68]

Box 4.5 Three proposals on the geographical level or scale of REDD accounting and incentive mechanisms

Demand-side management: The dynamics of the world timber trade do not adequately identify illegal timber either at the point of origin or at the point of receipt. The illegal logging trade has been estimated to account for US$23 billion per year. Measures must be put in place to ensure importers are legally responsible if the import of illegal logs occurs. One such proposal, called "carbon deficit levies" (CDL), would necessitate a detailed transaction log, and quantification of emissions from non-REDD certified logs imported.

Interaction with the price of commodities: The opportunity cost of avoiding deforestation on forested lands rises when the prices of commodities such as soya and beef rise. The allocation of additional payments under an index clause in the carbon contract when such commodities rise above a certain predetermined level could assist in offsetting fears in this regard.

EU Forest Law Enforcement, Governance, and Trade (FLEGT): A timber licensing agreement concluded between the EU and tropical timber exporters under Voluntary Partnership Agreements to ensure only legally-harvested timber is imported into the EU. Certain preconditions for FLEGT accreditation provide a mechanism through which the EU can exercise control over illegal logging and some of that burden can be shared.

Sources: Fry (2008); Angelsen (2008).

Key message: Safeguards must ensure that in the event of carbon leakage, the parties to the carbon contract are not left without a pre-assigned contractual redress. The legal framework must incorporate guarantees that carbon will be stored for the specified contract period.

66 *Regulation of the Ministry of Forestry of the Republic of Indonesia, supra* note 19, Art. 3 (2).

67 Fry, *supra* note 16. It is submitted that separate national discount factors on the basis of country investment risk are politically unrealistic.

68 On the issue of FLEGT, *see* Commission Regulation (EC) No 1024/2008 of 17 October 2008 (laying down detailed measures for the implementation of Council Regulation (EC) No 2173/2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community).

4.3.5 Liability mechanisms for lost carbon

There appears to be consensus that emissions offsets from A/R projects are not permanent offsets for the purposes of the CDM, an uncertainty mirrored in REDD discussions. In the event then that the carbon contained is released, either through anthropogenic interference, leakage (on-site and off-site), or natural disturbances, which party should shoulder the loss? Until developing countries have themselves binding emissions targets which necessitate accounting for all sinks and sources, the apportionment of liability between developing country (provider of REDD credits), and developed country (receiver) will be fraught with difficulty.[69] How an equitable risk allocation clause should be framed in order to ensure protection of buyer, seller, and environmental integrity is therefore fundamental. A shared liability partnership, or forest compliance partnership, proposes to apportion a certain percentage of liability on developed countries for the permanence of REDD credits, in the form of a sectoral bubble between Annex 1 and non-Annex 1 countries.[70] The emissions reduction/removal could be accounted in the land-use sector target of the developing country partner as if they had occurred in their own forests.[71]

The liability apportionment should be explicitly specified in the carbon contract, and will depend on who the contracting parties are, what parties are contracting for, for how long (length of contract is also intertwined with safeguard obligations), at what price, and the definitional scope of a *force majeure* clause (see Section 4.3.6). For example, if the REDD project involves private parties offsetting carbon emissions under a climate change obligation, determination of liability will take on added significance, as it will be linked to a legal obligation on the buyer's part, failing which a penalty will apply. On the supply side, if the contracting party is the state, local government, or a community representative, liability clauses will be adjusted accordingly. It appears unlikely that a substantial REDD project would proceed unless state guarantees are provided. In the absence of any clear liability framework, previous A/R projects' treatment of the issue may provide guidance, as exemplified in Box 4.6 below (bearing in mind the issue of lost carbon was blunted by the use of temporary credits with expiry dates).

69 Angelsen, *supra* note 14, at p. 84.

70 Kyoto Protocol, *supra* note 1, Articles 3(3) and (4).

71 Dutschke, M. (2008). "Methodological concepts of REDD". Briefing paper produced for the workshop *Managing Forests in Mekong Countries for Carbon Sequestration and REDD*, Hanoi, 27–30 October, 2008.

Box 4.6 Liability for forest carbon projects under A/R[72]

The commercial uptake of A/R projects has been slow, due to a lack of willingness to provide up-front payments to sellers of carbon credits in the absence of any collateral, as well as buyer concerns that a seller may renege on an afforestation project, or simply not implement it in the first place. In this regard the following two projects represent liability apportionment that assisted project deployment:

- The Mexican Scolel Te "Activities Implemented Jointly" (AIJ) pilot project for A/R projects holds the participating farmers liable for any carbon loss during the contract's 25-year duration.
- The Costa Rican AIJ implemented project buffers for 20 years, with the government assuming liability for lost carbon.

The existence of buffers and adequate insurance mechanisms, coupled with dispute-resolution clauses, may offer proactive legal solutions to guard against future liability tangles. It should also be pointed out that depending on whether long-term or short-term REDD credits are envisaged, the extent of liability will vary greatly.

Key message: Liability apportionment in the event of carbon leakage must be explicitly stated in the contract, and method of redress should be set out.

4.3.6 Force majeure

A key accounting issue is how to address non-anthropogenic emissions, which touches on liability, baselines, and additionality. The extent of a country's emissions from REDD could be greatly distorted from natural disturbances such as forest fires and non-endemic insects, and the definition, scope, and legal procedure for dealing with these occurrences must be written into the agreement. One proposal put forward recently was the "reverse onus test", whereby a country must show that if a disturbance occurred, it was not natural. A positive or negative list could be developed to serve this purpose, or defined parameters within which a non-anthropogenic event could be contemplated. If it was subsequently approved that the occurrence was due to non-anthropogenic events, a "time out" from the accounting period could be given to factor in this occurrence.[73] Whatever legal mechanism is put forward, it is imperative that accounting reflects what is emitted into the atmosphere in a manner that does not result in inequities/perverse outcomes.

72 Palmer, C. *et al.* (2009). "Ensuring permanence in forest carbon sinks under incomplete contract enforcement". *See* further Dutschke, M. and Schlamadinger, B. (2003). Practical issues concerning temporary carbon credits in the CDM, at p. 5. HWWA Discussion Paper 227.

73 *See* the comments of Tuvalu on the draft decisions on other issues identified in paragraph 49(c) of the document FCCC/KP/AWG/2009/10/Add.3, discussed in Bonn, Aug 11–15.

4.4 Conclusions

By carefully identifying and considering legal issues regarding the formulation of REDD baselines, the pursuit of project permanence, and the achievement of additionality, it is hoped that governments will be able to build strong national legal frameworks for REDD. The overarching aim of a REDD framework must be to ensure close correlation between emissions reductions and earned carbon credits, and in this regard, ensure that:

- The project is not merely subsidizing a pre-existing avoided deforestation activity;
- Baselines are set taking into account relevant national circumstances that will underpin overall environmental effectiveness;
- Permanence is assured through appropriate benefit sharing, national-level safeguards, and prior assigned apportionment of liability.

The underlying aim of any REDD regime is to ensure reduction of GHG emissions, and this must be the guiding criteria behind any REDD regime. In this regard, analysis of the national case studies has revealed inefficient legal frameworks with laws that directly contradict the aims of a REDD project, while a lack of harmony between national and sub-national legislation may prove to be a significant barrier to sub-national implementation if benefits are not apportioned. In order to achieve a stable, long-term emissions reduction project, legal certainty as to the permanence of carbon stored (i.e., the investment) must be assured.

Summary and Recommendations

John Costenbader*

At the time of publication, much is still uncertain about a future international REDD agreement, or even whether Parties to the UNFCCC will reach a formal agreement. Regardless of the form of a future international regime, many details will still remain to be developed by national law (and influenced by national socio-political factors) to make the mitigation of carbon emissions from deforestation and forest degradation a reality. Above all else, national leaders and law makers should concentrate on ensuring that REDD legal frameworks reflect a long-term vision leading to comprehensive reforms of national forest governance and sustainable development goals, rather than merely a short-term, profit-driven strategy.

The challenges facing the implementation of existing measures to tackle deforestation may be serious impediments to the successful establishment of REDD. While REDD has the potential to provide significant financial incentives to halt deforestation in tropical forest countries, the achievement of this aim depends on a number of governance-related factors. These factors may be summarised by clarity, coherence and flexibility in legal frameworks; coherence and capacity among institutional mechanisms; and flexibility in light of a dynamic international REDD regime.

1. Clarity, coherence and flexibility in legal frameworks

1.1 Legal clarity as facilitating equity, efficiency and effectiveness

At both an international and national level, the development of law and policy regimes to enable REDD should be informed by the experiences of past internationally-funded developing country forestry activities, such as prior work under the UNFCCC. Notably, despite the years of research and negotiations that resulted in the Marrakesh Accords (COP-7 in 2001) framework for Land Use, Land Use Change and Forestry (LULUCF) projects under the Kyoto Protocol, only eight A/R projects have been registered under the CDM at the time of writing (under 0.5 percent of total registered projects).[1] Much of the difficulty in A/R projects under the CDM has stemmed from the difficulty that project developers and local partners have had in navigating the complex rules and modalities required by the UNFCCC.[2] Similarly, REDD pilot project developers have had to navigate complex and unclear national laws relating to forestry, land rights, environmental approvals, and foreign investment law,

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1 UNFCCC. "CDM Home." http://cdm.unfccc.int/Projects/ ("Project Search", Sectoral Scopes: "Afforestation and Reforestation Projects", Status: "Registered"). (Last visited 6 November 2009).

2 Robledo, C. *et al.* (2008). *Climate Change and Governance in the Forest Sector: An overview of the issues on forests and climate change with specific consideration of sector governance, tenure, and access for local stakeholders,* p. 21. Washington DC, USA: Rights and Resources Initiative.

and these difficulties are likely to increase under a future REDD regime. Clarity and predictability in REDD regulatory frameworks would attract outside investment or purchases, as transaction costs could be reduced and investor confidence increased. Whether developing new national REDD laws or merely modifying existing environmental or forest law frameworks, then, law and policy makers should endeavour to avoid contradictions and clarify relevant laws and legal mechanisms.

Streamlining REDD legal procedures, via mechanisms such as standardized indices and universal project methodologies, could reduce administrative difficulties for governments and transaction costs for investors.[3] Given the variety of complicated new legal and technical concepts and methodologies that will be required in developing countries hosting REDD programmes, administrative procedures and workloads could be reduced by employing universal definitions and standards, ideally tied to internationally-agreed definitions and indices. Similarly, countries should reconsider antiquated laws and legal concepts existing in their legislation that could pose conflicts for parties in their national REDD system. For example, given the advantages of a separate proprietary ownership interest in carbon, as established in Chapter 1, it may be more efficient for countries to adopt a generally accepted definition of such an ownership interest in order to facilitate carbon investments, rather than persisting in using unworkable definitions of carbon rights in terms of land or forest ownership. To ensure harmony across national legal systems, however, carbon ownership interests then should be recognized under other sectors of law according to the same definition.

Judging from the case studies and review of other national experiences to date, it does not seem necessarily advisable that all REDD host countries enact brand new legal instruments in order to provide for successful REDD projects. At a minimum, at least in the short term, countries should ensure that the existing legal framework can address the needs of REDD activities and their participants. This may entail re-interpretation of existing laws, and capacity building (in administrative and judicial branches of government especially) in order to apply old laws to new REDD projects and procedures. Additional room for working within existing law may be created by better land-use planning, in particular choosing project sites that avoid areas subject to conflicting legal claims such as areas characterized by unclear rights in land. However, in countries like Indonesia, such sites may be difficult to find, given the controversy over indigenous rights described in Chapter 1. Alternatively, this approach may entail amendments to existing legal instruments, when interpretation may not be sufficient to effectively support REDD activities, as well as to provide more legal certainty.

1.2 Coherence and capacity among institutional mechanisms

For successful implementation of national REDD programmes, legislation should clarify the main institutions responsible for regulating and implementing them. In turn, such national-level institutions will require efficient participation among themselves as well as with a range of national and sub-national institutions, including: environmental and/or forestry agencies with general forest management jurisdiction; Designated National Authorities responsible for UNFCCC monitoring, reporting, and verification (in conjunction with independent auditors); national treasuries or other financial agencies empowered with distribution of international credits or funds to sub-national actors

3 Rosenbaum, K.L., Schoene, D. and Mekouar, A. (2004). *Climate change and the forest sector. Possible national and subnational legislation,* p. 45. FAO Forestry Paper 144. Rome, Italy: FAO.

(if necessary, according to a national administrative law framework); indigenous affairs agencies or other social programmes responsible for local and indigenous communities; land-use planning and agricultural bureaus; foreign investment-related agencies; and judicial bodies. Whether via a new law or amendments to existing laws, legislatures will need to provide well articulated procedures for participation to ensure coordination among different administrative agencies, transparency in decision-making and access to dispute resolution mechanisms.

Institutional interaction and coordination should be ensured through detailed legal procedures, which also may allow for participatory and transparent decision making and review of administrative decisions. Finally, such institutions should be given adequate enforcement powers, and internal review mechanisms should be established to monitor progress in the implementation of REDD-related administrative programmes. Transparency and participation should also be ensured at the implementation, enforcement and review stages, with a view to building truly collaborative partnerships between institutions and REDD stakeholders.

For REDD institutions to function, a multitude of actors will need to work together across different levels and agencies in accordance with a wide array of relatively sophisticated laws and regulations. In addition to a variety of other sectoral skills that will be required for REDD systems to work, such as sophisticated financial, forestry, and business skills, human and institutional capacities in many countries hosting REDD will need strengthening to implement legislative and regulatory strategies successfully. Specifically, such countries will require national and sub-national administrative and parliamentary officials, as well as local lawyers and judges, to have the capacity to handle complicated procedural and substantive REDD legal issues, such as those relating to carbon trading and UNFCCC project documentation.[4] Developing such capacities should be made a key goal of an interim phase in REDD national strategies, in conjunction with international multilateral and bilateral entities.

1.3 Flexibility in light of a dynamic international REDD regime

Given the uncertain nature of a future REDD regime, and the potential for shifting between public and private funding sources (or for a combined system using both revenue sources), policy and law makers would be well advised to build comprehensive, flexible frameworks that may respond to various revenue or project-accounting options as their national REDD strategies develop and build capacity. Ideally, national government and market institutions should aim to take over the responsibilities of interim international institutions (e.g., UN-REDD, World Bank, or environmental or development NGOs) in order to strengthen national systems and ensure sustainable development.[5] Furthermore, it is possible that countries implementing REDD projects will incorporate REDD emissions reductions into a larger portfolio of Nationally Appropriate Mitigation Action (NAMA) registers currently under

4 Scherr, S. *et al.* (2004). *For Services Rendered: The current status and future potential of markets for the ecosystem services provided by tropical forests,* p. 55. ITTO Technical Series No 21. Yokohama, Japan: International Tropical Timber Organization (ITTO).

5 Streck, C. *et al.* (2009). REDD+ *Institutional Options Assessment: Developing an Efficient, Effective, and Equitable Institutional Framework for REDD+ under the UNFCCC.* Meridian Institute (citing the Paris declaration on aid effectiveness, which urges development aid to use domestic country systems and procedures, and where impossible, to create safeguards that "strengthen rather than undermine country systems and procedures").

discussion for a future agreement under the UNFCCC. Developing countries revising existing laws or creating new legislation should consider such a possibility and ensure national laws and institutions may be easily adapted to NAMAs, which would provide a common systematic basis for coordinating funding for and MRV of all national mitigation activities.

If A/R projects under the CDM and voluntary markets are any indication of REDD markets, the private sector may be more interested in simply buying forest carbon credits instead of investing in long-term forestry projects.[6] This is likely in large part due to concerns regarding additionality and permanence, relative inefficiency of carbon sequestration compared to other types of offset projects and high costs of such projects (especially when forest governance costs are added to the equation).[7] If that is the case (and should a REDD regime allow direct carbon deals between buyers and sellers), then law and policy makers might work to develop substantive criteria for contract clauses to guarantee fair treatment of local participants. Such standard clauses could be developed similarly to work on mutually agreed terms for access and benefit sharing under the CBD.[8] Where dual private-public REDD systems are contemplated, standard clauses should supplement rather than weaken the aims of broader government regulatory structures for benefit sharing, ownership and use rights, and participatory standards regarding land-use decisions in national programs. Furthermore, although effective and efficient national processes should attract buyers and investors to REDD projects, alternative project models such as investor-community joint initiatives coupled with tax or other regulatory incentives may stimulate outsider interest in local forest projects further. Given the high start-up costs and methodological hurdles of PES and A/R projects to date, such alternatives also could help those low-income local and indigenous communities to participate in REDD that to date have been unable to take part.

2. Substantive guiding principles

Having covered in previous chapters the main components of a national legal framework for REDD and the various detailed legal options for each, it is worth summarizing these findings in light of the broader array of relevant environmental governance factors. Of course, every REDD host country has its own unique set of socio-political, economic and bio-geographical contexts. Such factors will determine what type of regulatory frameworks and payment systems will best help it halt deforestation by addressing its drivers while also ensuring transparent participatory processes and fair allocation of benefits. However, some general conclusions regarding REDD regulatory frameworks seem enduring no matter the national or local reality.

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6 Manguiat, M.S.Z., Verheyen, R., Mackensen, J. and Scholz, G. (2005). *Legal Aspects in the Implementation of CDM Forestry Projects*. p. 60. IUCN Environmental Policy and Law Paper No. 59. Gland, Switzerland and Cambridge, UK: IUCN.

7 Business for Social Responsibility. (2006). "Offsetting Emissions: A Business Brief on the Voluntary Carbon Market", p. 9. Ecosystem Marketplace, Katoomba Group. *See also*, Angelsen, A. (2008). *REDD Models and Baselines*, pp. 465-466, International Forestry Review Vol.10 (3), 465-475.

8 Secretariat of the Convention on Biological Diversity (SCBD). (2002). *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization.* pp. 12-15. (CBD COP Decision VI/24, Annex). *See also*, Täuber, S, *et al.*, (2009). *An economic analysis of new instruments for Access and Benefit-Sharing under the CBD – Standardisation options for ABS transaction*, pp. 10-24, Interim Report. Bonn, Germany: Bundesamt für Naturschutz (BfN).

2.1 Land, forest and carbon ownership

The successful establishment of REDD projects will require that rights to land and forest resources be clarified and assigned to stewards capable of controlling and managing forests for carbon sequestration. In many cases, this will entail strengthening local communities' involvement in protecting forests, and building on links with local actors to control the exploitation of forest resources and enforce regulations.[9]

Regulatory frameworks on REDD should clearly determine who owns the right to the carbon sequestered in forests. Carbon ownership may either be treated as separate proprietary interest, or a proprietary interest linked to forest or land ownership. The creation of carbon credits separated from land ownership could facilitate their circulation on the market. If rights over sequestered carbon are transferable, some fraud prevention issues may arise, similar to the ones posed by other rights associated with property. The decision on who will bear the risk for variations in the sequestered carbon depends on the nature of the property right and of the transaction.

2.2 Participation

National legislation will need to create or strengthen existing rules ensuring public participation in decision making (including access to information and access to justice) so that REDD stakeholders can contribute to, be taken into account in, and better understand decision making on REDD. Significantly, participation should be seen as an ongoing process, and be legally guaranteed at various levels (REDD policy and law making, programming, site-selection, assessment of environmental and social impacts, selection of REDD activity developers, definition of applicable conditions and setting up of benefit-sharing mechanisms, as well as monitoring of compliance). Detailed legal procedures will need to be in place, guaranteeing rights to consultation and/or PIC and clearly allocating relevant responsibilities to authorities and REDD activity proponents.

In addition, national legislation should support participatory arrangements for the actual undertaking of REDD activities, allowing joint initiatives by the government, landowners, LICs, and outside investors. Clarity and security of rights that have been defined in a participatory way is an essential precondition for successful REDD activities at the national level in this regard.

2.3 Benefit sharing

National frameworks for REDD need to establish appropriate incentives to make keeping trees standing an attractive alternative for local forest owners and users.The mere provision of formal land and forest rights, which is not supported by adequate enforcement and incentive mechanisms, may have no significant impact on deforestation. Forest dwellers and users excluded from the benefits of REDD are likely to resist the implementation of projects for fear that they will further curtail the exercise of their customary rights, and threaten their subsistence practices and traditional livelihoods. Therefore, secure land, forest and carbon ownership rights need to be supported by measures enabling forest dwellers and users to benefit from REDD.

9 Kanninen *et al.* (2007). *Do trees grow on money? The implications of deforestation research for policies to promote REDD*, p. 50. Bogor, Indonesia: CIFOR.

It is important to recall that different countries will have different ranges of actors potentially selling carbon sequestration services, including corporate groups and medium to large-sized landowners at one end, and low-income, smallholders and local and indigenous communities at another. Depending on their respective national or regional circumstances, then, policy makers will need to design legal mechanisms that incorporate both sophisticated contractual and financial regulatory elements for business entities, and safeguards protecting local and indigenous rights, information, participation and benefits.[10]

2.4 Additionality, permanence and baselines

In order to ensure climate benefits from REDD programmes, national laws should require independent verification to ensure that projects subsidizing a pre-existing activity resulting in avoided deforestation or forest degradation lack eligibility for REDD funding. National laws setting baselines should take account of past deforestation rates as well as future predictions under BAU scenarios, and be set based on national circumstances (while expressly barring 'hot air' targets) in order to provide for overall environmental effectiveness. Ultimately, legal frameworks and institutions must aim to ensure a strong correlation between carbon credits and actual emissions reductions. Legislative and regulatory criteria ensuring permanence should be established through strong benefit sharing, national emissions-level safeguards guarding against leakage, and assigned apportionment of liability.

One of the most critical decisions facing legislators is whether to adopt a nation-based or project-based approach to REDD.[11] A nation-based approach could provide flexibility to manage collective forest resources and help tackle the problem of in-country leakage. However, nation-based REDD policies would require strong governance and effective administrative checks. In many potential host countries, insufficient institutional capacity may seriously obstruct the implementation of a nation-based approach. In this connection, a project-based approach to REDD could be implemented more quickly and better accommodate in-country heterogeneity. However, this option presents challenges relating to leakage and liability. Hybrid arrangements could solve the impasse over nation vs. project-based REDD approaches. In any case, it will be important for governments to consider the comparative benefits of these options, as they may significantly influence the decisions of prospective forest carbon credit suppliers and buyers (or funders).

3. Short-term strategy vs. long-term vision

In order to establish robust, coherent and flexible laws and institutions that are substantively sound and integrated for generations to come, governments would do well to consider a timeline than only their short-term REDD program strategies. Ultimately, governments must integrate REDD into national sustainable development planning for REDD to succeed over the long-term, and thus should calibrate national legal frameworks to maximize equity, efficiency and effectiveness outcomes.

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10 Scherr, S.J. *et al.* (2006). *Developing Future Ecosystem Service Payments in China: Lessons Learned from International Experience,* p. 33. Washington DC, USA: Forest Trends.

11 For a comprehensive review on the issues summarised here, *see* Myers Madeira, E.C. (2008), *Policies to Reduce Emissions from Deforestation and Degradation (REDD) in developing countries: an examination of the issues facing the incorporation of REDD into market-based climate policies,* pp. 32-35. Resources for the Future Discussion Paper 07-50, Washington, DC, USA. Resources for the Future.

Globally, planning for the early years of REDD will need to focus on the paramount goal of mitigating climate change, an immediate need in order to "[stabilize] greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."[12] At the national level during this interval, tropical forest countries and their developed country partners must quickly develop the necessary forest governance capacity to implement REDD programs. Although this interim phase may resemble traditional development work, both developing and developed country partners should take efforts to ensure the original contractual nature of such efforts (both at the international and national levels) is not lost. Without the original 'market correction' thesis and conditionality of payments inherited from PES in a formalized legal arrangement rights and responsibilities, REDD would lack the solemn transactional understanding necessary for its success.

For REDD programs to endure and evolve in tropical forest countries, sustainable development must provide a lens for a long-term vision and must be reflected in legal frameworks. Specifically, for the long-term success of such programs, national laws and institutions for REDD should address the three pillars of sustainability, namely: environment, society and economy.[13] Briefly, with regard to an environmental pillar, REDD regimes should insure that forest carbon projects include biodiversity conservation and overall ecosystem health in addition to the immediate goal of mitigation of climate change impacts. Under a social pillar, national legal frameworks should integrate REDD with poverty reduction strategies, as well as ensure local and indigenous community and gender issues are given continuing consideration. Finally, an economic pillar should be addressed in long-term legal regimes by balancing forest carbon income creation with income from sustainable management of forests. Ultimately, all countries should strive to ensure national REDD systems gain independence from developed country assistance and integrate with a global market, thus increasing sustainable business opportunities for tropical forest developing countries. Although not addressed specifically in this study for the sake of expediency, the 'plus' factors of REDD+ (as listed in the Bali Action Plan) should play an important role in helping support the three pillars listed here in REDD host country programs and activities.[14] Should this long-term vision succeed, REDD could become a working example for the vague principle of sustainability and a model for other sustainable development projects.

The challenges facing the incorporation of REDD into climate change policies are many. If developing countries end up selling carbon offsets from reduced deforestation that do not correspond to actual emissions reductions, global carbon emissions would increase as a result. Nonetheless, REDD provides a unique opportunity to combine climate change mitigation with the sustainable development of forest-dependent communities and the conservation of some of the world's richest forest ecosystems. REDD cannot solve the many governance and legality questions associated with deforestation in developing countries, but it may act as a powerful incentive to address long-standing

12 UN Framework Convention on Climate Change. (UNFCCC) (9 May 1992) Art. 2, 1771 UNTS 107.

13 United Nations. (2005). "2005 World Summit Outcome". 60th Sess. UN Doc. A/60/L.1/2005. Art. 48.

14 UNFCCC. (2007). "Bali Action Plan". Decision 1/CP.13. Article 1(b)(iii). U.N. Doc. FCCC/CP/2007/6/Add.1. (adding "conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries" as secondary goals to the original objectives of avoided deforestation and forest degradation in REDD).

disputes and pending questions. In this connection, it is crucial to bear in mind the complexities of the drivers of deforestation and build upon lessons learnt through existing efforts to tackle such problems.

Part II

Annex I:

Checklists for development of national REDD legal frameworks

Overview of legal and policy issues in national REDD planning

❑ **Conceptual options for REDD**

1. REDD is a legal arrangement under which payment is made in return for the ecosystem service of carbon sequestration in tropical forests. In this context, carbon sequestration refers to the uptake and storage of carbon by forests.
2. REDD is a legal arrangement under which payment is made for the outcome of protecting standing forests.
3. REDD is a legal arrangement under which determining the scope of REDD activities is subject to some flexibility at the national level, for example:
   a) *additional payments for intact forest ecosystems (not just trees standing);*
   b) *additional revenue from forest use (e.g., NTFPs, tourism, bio-prospecting, including development of pharmaceuticals).*

❑ **Eligibility for REDD**

1. To be determined at an international level, most likely
   a) *developing countries with forests are eligible for conducting REDD activities, provided additionality of forest protection can be proven via either historical or future projected deforestation or forest degradation.*

❑ **Readiness for REDD**

1. carbon inventory/ baseline information
2. management capacity
3. governance arrangements
4. provision of technical support
5. co*verage of start-up costs*

❑ **Evaluation of the current status**

1. What is the current state of national forests?
   a) *highly forested, high deforestation*
   b) *highly forested, low deforestation*
   c) *low forest cover, high deforestation*
   d) *low forest cover, low deforestation*
2. What are the deforestation and forest degradation drivers?
   a) *are there laws or policies that provide perverse incentives?*
   b) *do agriculture (including livestock), mining, logging, pollution, biofuels, infrastructure development, wildlife trade, etc. contribute directly or indirectly to deforestation and forest degradation?*
   c) *to what extent do poor governance and enforcement play a role?*

N.B. 'forest degradation' in this context means a loss of carbon in the forest including emissions from forests caused by a decrease in canopy cover. It can also include impoverishment of standing forests mainly caused by human activities such as overgrazing of animals, pollution, unsustainable extraction of flora or fauna etc.

▶

3. Legal analysis: What laws are relevant to forest?

   a) *international obligations forming part of national law*
   b) *constitution*
   c) *primary legislation: national, state, provincial*
   d) *subsidiary legislation*
   e) *case law*
   f) *customary law*
   g) *relevant laws of 'donor countries'*

4. Institutional analysis:

   a) *which institutions' activities are related to or have an impact on the forest*
   b) *what is the legal mandate of the institution*
   c) *does the institution have the capacity to carry out its legal mandate*
   d) *do officials or agencies within the institutions have the appropriate political clout for the institution to carry out its legal mandate*
   e) *how effective is the institution in carrying out its mandate*
   f) *is there concurrent or conflicting jurisdiction between institutions*
   g) *are there procedures for institutional coordination*

❑ **Architecture of national REDD scheme**

1. Who is to be involved in design of REDD scheme?

   a) *government (national, federal, state), institutions, communities, civil society*
   b) *inclusion of traditional knowledge systems*

2. What mechanism shall be used for ensuring flexibility for adapting the REDD scheme to national circumstances?
3. Is there a transboundary element (negotiated by governments) to be considered?
4. Which areas will be involved: all forests in the country, some forests, phased approach by which forest areas are brought under REDD over time?
5. How does the scheme address leakage (i.e., shifting deforestation to other areas not in the REDD scheme)?
6. What is the system for obtaining an inventory of carbon?
7. What is the system for managing carbon credits or carbon payments?
8. Basis of payment from the international level – is payment conditional upon:

   a) *protection of the forest (or potentially for proxy factors e.g., improved governance)*

10. What mechanisms will ensure maintenance of forest-based cultures, livelihood and way of life?

❑ **Ownership and rights**

1. What ownership rights exist over the forest under:

   a) *statutory law (e.g., title, lease, covenant, easement)*
   b) *customary law (e.g., indigenous, tribal or communally-held territories)*

2. What ownership rights exist over the carbon in the forest?
3. What other rights exist in relation to the forest, for example:

   a) *rights of access, user rights/privileges, mortgage, usufruct, licence*

▶

4. Do any claims exist over the forest, for example:
   a) claims to title, use, occupation
5. Are there any conflicts over the land, such as:
   a) competing claims of national sovereignty, competing claims to ownership or use, boundary disputes

❑ **Decision making process**

1. Who has the right to make decisions regarding the REDD scheme?
   a) state, landowners, etc.
2. What legal mechanisms exist for participation in decision making?
3. Does the decision maker need to obtain Prior Informed Consent (PIC) from others?
   a) is PIC legally required, and if so from whom
   b) what is the process for obtaining PIC
4. Do decision makers need to consult stakeholders?
   a) what is the process for defining stakeholders?
   b) what legal mechanisms exist for consultation?
5. Is an Environmental or Social Impact Assessment legally required?

❑ **Access to information**

1. Is there an obligation (e.g., for government, project managers or investors) to provide information, particularly information held by government?
2. Who will receive information?
3. How is information made available to people accurately and in a timely manner?

❑ **Dispute settlement**

1. Is there a system for identifying, preventing and resolving conflict between stakeholders (e.g., administrative review, mediation, alternative dispute resolution, arbitration, litigation)?
2. Are stakeholders aware of the existence of that system?
3. Is the system affordable and accessible?
4. Does the system provide a result within a reasonable period of time?

▶

❑ **Payment**

1. What is the source of funding for REDD?
   a) *public funding*
   b) *carbon credits*
2. What legal mechanisms exist for making the REDD payments?
3. To whom will the payments be made?
   a) *direct payments to state*
   b) *direct payments to owners/users of forests*
   c) *indirect payments via an intermediary*
4. What are the modalities of payment, for example:
   a) *time period, payments in advance, payment for performance*
5. How is the amount of payment calculated – price of carbon?
6. How will the scheme deal with fluctuations in the price of carbon?
7. What legal mechanisms exist for deciding who gets what revenue?
8. Will there be non-monetary benefits?
   a) *if so, what is the rationale, basis and amount*
9. What legal mechanisms exist for taxes, subsidies or state payments?

❑ **Implementation of national REDD scheme**

1. How will the REDD Scheme be implemented?
2. Which are the implementing institutions?
   a) *government agency*
   b) *traditional/community management*
3. What is the legal framework for REDD, for example:
   a) *REDD specific legislation, amendments to existing legislation*
4. Should REDD build on national initiatives, for example:
   a) *is there scope for using a protected areas system for implementation, integration with government systems for extending services such as education and health, forest law enforcement and governance initiatives*

❑ **Monitoring, reporting and verification (MRV): payment for results**

1. What system is to be used for monitoring the participation by forest dwellers and users in the REDD Scheme?
2. What system is to be used to monitor individual projects within the REDD scheme?
3. What are the reporting requirements: who reports and to whom?
4. What system is to be used for verification?
   a) *protected areas*
   b) *remote*
   c) *satellite*
   d) *imaging*

Annex II:

Checklist Chapter 1: Ownership of Land, Forests and Carbon

Object:

Laws and regulations that provide who owns, or has rights to, the carbon in forest biomass.

❑ **Preliminary steps towards establishing forest ownership**

1. Who owns the forest? Who owns the land? Are forest and land ownership rights clear and secure?
2. Is the forest subject to multiple/conflicting uses? Do these uses comply with the requirements prescribed by the law (or contract)?
3. Does domestic law recognize the land claims and use rights of local communities and indigenous peoples?
4. Does domestic law provide effective mechanisms to prevent or resolve competing claims to ownership and use of forest land?
5. Do rules governing the sale and allocation of rights over, and use of, forests create perverse incentives for deforestation?

❑ **Preliminary steps towards establishing carbon ownership**

1. Does domestic law provide any definition of rights relating to forest carbon sequestration?
2. If this is not the case, are the benefits resulting from carbon sequestration distributed to forest landowners or to any other subject?
3. What, if anything, can be done to protect and maintain unencumbered legal title to the carbon sequestered in a forest?
4. Are there any legal restrictions on the transfer of carbon sequestered in the forest?

❑ **Options for forest carbon ownership**

1. The forest owner owns the carbon sequestered in the forest and:

   a) *The capacity of the forest to sequester carbon may not be sold independently of the forest. However, the owner may undertake the obligation to manage the forest in a way to increase the carbon stock. This obligation could be in the form of:*

      1. *a contract;*
      2. *a covenant that runs with the land, binding anyone who owns the property in the future;*
      3. *a covenant that attaches to a person;*
      4. *an easement or servitude, which may attach to a dominant estate or to a person. In the latter case, the carbon sequestered in the forest may be transferred independently of any land transfer.*

▶

b) The capacity of the forest to sequester carbon is the object of a separate, alienable property right, such as a usufruct right or profit à prendre, governed under the laws concerning land ownership. The owner can sell that right without conveying land ownership. In this context, two options may be envisioned:

1. The owner of the carbon has the right to affect the use of the forest to protect the existing forest carbon stock, or to enhance it;

2. The owner of the carbon has no inherent right to affect how the forest is used. However, the landowner may separately grant this right through a contract, or through a covenant or other legal mechanism that "runs with the land" and binds any property owner.

c) As in (ii) above, but the right is governed under general contract law.

2. The carbon sequestered in the forest is a publicly-owned asset:

a). The government holds the forest carbon stock as trustee for the benefit of forest owners or of the public, with no power to sell it or give it away. In this context, two different options may be envisioned:

1. The government has no particular power to require landowners to protect or enhance sequestration; or

2. The government has the power to regulate the use of land to protect or enhance carbon sequestration.

b) The government has the power to sell or give the forest carbon stock away. In this connection, two main options may be configured:

1. The acquisition of carbon stocks may be open to anybody;

2. Only a limited number of entities may be eligible to own carbon stocks, such as entities emitting carbon and desiring offsets; "banks" chartered to deal in mitigation credits; NGOs interested in environmental protection; indigenous peoples or other groups of forest stewards.

Checklist Chapter 2: Participation, Balancing of Rights and Interests, and Prior Informed Consent

Object:

Laws that provide relevant stakeholders (particularly landowners, indigenous and local communities, and outside investors) with opportunities to access REDD-related information, participation in REDD-related decision making, access to justice, and involvement in REDD activities.

❑ **Preliminary steps towards guaranteeing participation**

1. Is there any restriction to the participation of outside investors in REDD activities in domestic law?
2. Does domestic law require that landowners consent to or necessarily participate in REDD activities on their land?
3. Does domestic law require consultations with, or the prior informed consent of, indigenous and local communities as a condition for the development of REDD activities on their lands or on lands that they traditionally have access to and use?
4. Are there any requirements or incentives for local and indigenous communities to participate in REDD activities on their lands or on lands that they traditionally have access to and use ?

❑ **Options for participation in REDD**

1. Access to information:
   a) *National legislation assigns clear and specific duties to public authorities and REDD project proponents to collect and make widely available REDD-related information;*
   b) *National legislation assigns clear and specific duties to public authorities and REDD project proponents to provide REDD-related information upon request to stakeholders, and in particular to potentially affected landowners and LICs;*
   c) *National legislation recognizes the right of the public to obtain REDD-related information.*
2. Participation in decision making:
   a) *National legislation requires that interested stakeholders have a right to participate in meetings relevant to the REDD decision-making process;*
   b) *National legislation requires that public authorities share draft REDD-related decisions with the public, allowing for the submission of comments, and that they take reasoned decisions on the basis of the comments provided;*
   c) *National legislation requires that a permanent multi-stakeholder body is established with a clearly defined role in the REDD decision-making process.*

▶

3. Access to justice:
   a) *National legislation recognizes the right of affected stakeholders to have administrative recourse against REDD-related decisions;*
   b) *National legislation requires REDD project proponents to set up grievance mechanisms to provide a culturally appropriate, inexpensive and decentralized venue for dispute-prevention and resolution for affected stakeholders;*
   c) *National legislation provides for means to obtain redress to those negatively affected by REDD activities.*
4. Participation in REDD activities:
   a) *National legislation requires/provides incentives to outside investors to cooperate with landowners and LICs in the implementation of REDD activities;*
   b) *National legislation gives priority/provides incentives to LIC-led REDD activities, and mandates public authorities to provide technical and other support to LICs to this end;*
   c) *National legislation requires that the benefits arising from REDD activities are shared also with landowners and LICs, subject to conditions to be agreed upon in a transparent and participatory process by all relevant stakeholders.*

Checklist Chapter 3: Benefit Sharing

Object:
Laws providing clear principles and procedures for determining benefit-distribution arrangements for REDD-related activities, guaranteeing opportunities to reward private landowners, local and indigenous communities, and also clearly allocating part of benefits to government programmes and outside investors.

❑ **Preliminary questions in establishing REDD benefit-sharing framework**

1. Does domestic law provide for benefit sharing in REDD activities?
2. What is the nature of benefit distribution system and benefits to be distributed under existing laws or those contemplated for REDD?
3. Does domestic law provide for public participation in benefit-sharing design (including local and indigenous communities in particular)?
4. Does domestic law provide for both management of international inflows and sub-national outflows?

❑ **Options for sharing REDD benefits**

1. International-national benefit interface
   a) *National laws define clear regulatory and/or contractual approach appropriate for national funding source (e.g., private credits, voluntary markets and/or public funds) and sub-national stakeholders.*
   b) *National law defining an accounting-crediting scenario opts for a framework making best use of current national and local circumstances, especially with regard to governance capacity.*
   c) *National law identifies necessary institutional and legal arrangements required to progress to national-level accounting scenario, if not chosen in first phase of REDD.*
   d) *National law harmonizes accounting scenario(s) and finance mechanism(s), including clear reference to relevant national and sub-national institutions and actors.*
2. Monitoring, reporting and verifying
   a) *National law incorporates clear auditing, enforcement and benefit distribution safeguards to ensure that verified REDD benefits correspond to actual emissions reductions and responsible actors.*
   b) *National legislation assigns specific, verifiable duties and accountability procedures to agencies and authorities responsible for benefit distribution.*
   c) *National laws for REDD benefit programme design and distribution are streamlined and harmonized to enhance clarity.*
3. Structuring transactions
   a) *National law makes payments conditional on completion of performance period or in audited intervals.*
   b) *REDD benefit regulations allow flexibility in the consideration of the opportunity cost of forest preserved and international prices for units of carbon sequestered.*
   c) *National legislation allows small landholders to bundle projects and assigns the duty to inform and technically assist small landholders to appropriate government authorities.*

▶

4. Balancing benefits to actors

   a) *National law clearly identifies the eligible local and foreign stakeholders that can benefit from REDD activities and stipulates clear procedures for local stakeholders to participate in the design of specific benefit-sharing arrangements.*

   b) *Where private contracts between international actors and local project participants and/or developers are envisaged, applicable national taxes or royalties are identified clearly, including provisions on where such funds are to be directed, and audits on such flows.*

   c) *National legislation allows for wide range of benefits to be allocated to sub-national actors, and clearly identifies benefit shares distributed to relevant actors (or taxes or royalties due to national or sub-national governments).*

   d) *REDD benefit-sharing programme design provides for local stakeholder (e.g., LICs and private landholders) inputs into choice of type of benefits to be allocated.*

   e) *National laws afford adequate protection to foreign investors (while not prejudicing local interests) and create/strengthen redress mechanisms to this end, in order to provide an attractive and predictable environment and to attract investors.*

Checklist Chapter 4: Additionality and Permanence

Object:
Regulatory and contractual elements to ensure that national REDD projects achieve additional forest carbon emissions sequestration than would be achieved in their absence; reference clear emissions baselines; and assure permanent results.

❑ **Preliminary questions**

1. Do national laws establishing REDD project eligibility criteria require that the project's proposed activity or land use result in a greater reduction in forest carbon emissions than its current use?
2. Do existing laws already provide adequately for the funding of deforestation initiatives or for the protection against deforestation in proposed REDD sites?
3. How are national baselines established currently, and how do they incorporate sub-national and/or project baselines?
4. Do national laws require proposed REDD projects to be designed in order to guarantee permanence of carbon emissions sequestered?

❑ **Options for establishing additionality, baselines, and permanence in REDD projects**

1. Meeting the additionality prerequisite
   a) *National laws require the following for eligibility (at a national or sub-national level):*
      1) *The project site is destined for deforestation and the proposed land use will avoid deforestation;*
      2) *There are no existing government measures in place that adequately fund or provide for the execution of the proposed project's aim of reducing deforestation.*
2. Baseline development
   a) *National laws define forest carbon emissions reference levels by one of two possible baselines:*
      1) *Historical deforestation: credits are proportional to the reduction of deforestation below the level of a past period (e.g., an aggregate of the last decade or that of a fixed past year);*
      2) *Future deforestation: credits are based on the reduction in actual emissions from estimated future deforestation levels after the commitment period.*
   b) *National laws require a clear timeframe for REDD project contracts, including a periodic review.*
   c) *National laws incorporate the standard UNFCCC classification, scope and definition of "forest".*
   d) *National law or the project contract sets a standard to measure the project's benefits.*
   e) *If national law envisages the bundling of various projects, the relationship between the sub-national baseline and the guiding national baseline is defined.*

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3. Ensuring permanence: avoiding leakage, possible safeguards, liability

   a) *Land title, carbon ownership, and customary rights are verified, and conflicting interests between contending landowners or with prior concessions are resolved prior to entering into a REDD contract.*

   b) *The REDD mechanism ensures a uniform benefit-sharing process which extends the same benefits to all landowners across local, provincial, and national levels.*

   c) *National laws require that the sellers of long-term credits ensure carbon is stored for the lifetime of the contract (potentially via forward contract), and use a discount factor and safeguards to control for risk.*

   d) *National law requires REDD projects to monitor and reflect local reductions in a national baseline registry.*

   e) *National law ensures carbon will be stored for a specified contract period via safeguards, such as: penalties against landowners for non-compliance; exclusion from funding; set-aside credit insurance; redress for buyers.*

   f) *The REDD contract contains an equitable risk allocation clause, or a shared liability partnership between developed and developing countries.*

   g) *The REDD contract explicitly states liability distribution and means of redress in the event of carbon leakage.*

   h) *The REDD contract includes a force majeure clause containing a legal procedure for addressing occurrences of non-anthropogenic emissions which affect liability, baseline, and additionality.*

Annex III: Country Studies

Case Study: Brazil

Émilie Champagne* and Josh Roberts**

1. Origin and background of REDD in Brazil

On the international stage, Brazil has taken an active approach in contributing towards the development of REDD. At the domestic level, it has been actively developing practical experience with REDD, and is currently developing a legal framework for REDD's inclusion in a Post-Kyoto Framework.

Brazil currently has six REDD projects ongoing. One of the most visible projects is the "Juma Sustainable Development Reserve Project", which was created in 2006. The project is located in the State of Amazonas, which is suffering from heavy deforestation due to increasing rates of agriculture and cattle ranching. The area has been established as a Protected Area (PA) for Sustainable Use (*Unidade de Conservação de Uso Sustentável)*, and was created as a financial mechanism for compensating REDD activities. The resources raised from the sale of carbon credits will permit the Amazonas Government to implement measures necessary to monitor the forest within the project site, combat illegal logging, and improve the welfare of local communities.

The Juma Project is being implemented by the State Secretariat for the Environment and Sustainable Development of the Amazonas (*Secretaria do Meio Ambiente e Desenvolvimento Sustentável do Amazonas*, hereafter, "SDS") and the Amazonas Sustainable Foundation (*Fundação Amazonas Sustentával, hereafter*, "FAS").[1] Technical assistance is provided by the Institute for Conservation and Sustainable Development of the Amazonas (IDESAM),[2] a not-for-profit NGO. Marriot International is also supporting the project by providing annual investments of US$500,000 per year, for four years, combined with revenues from hotel guests to offset their carbon emissions (US$1/room/day).

There are several issues that will need to be considered when developing REDD legislation in Brazil. First, Brazil, a federation, will need to navigate between national and sub-national carbon initiatives. Moreover, complex layers of regulation and uncertainty over land ownership in the Amazon pose great challenges for the implementation of future REDD projects in Brazil. Furthermore, while Brazil has laws to combat illegal logging, it has a fairly poor track record on enforcement. In order to

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1 *Fundação Amazonas Sustentável.* The FAS is a private, independent and not-for-profit institution of public interest and without party political connections.

2 *Instituto de Conservação e Desenvolvimento Sustentável do Amazonas.*

have a successful REDD programme in Brazil, these issues will need to be addressed in subsequent legislation.

2. Existing legal and policy framework

In Brazil, there is currently no national federal climate change law or legal framework for REDD. The REDD process is instead governed by various federal and state policies, regulations, and laws (as well as a number of state carbon laws), which lay the legal foundation for initiating REDD projects in Brazil.

2.1 Policy framework

Initiatives to combat climate change and deforestation in Brazil are guided by two overarching policies: the *National Plan to Combat Deforestation and Plan to Combat Deforestation at State Level for the Period 2008–2011* ("Deforestation Plan"),[3] and the *National Plan on Climate Change* ("National Plan").[4]

Launched in 2008, the National Plan reveals Brazil's climate change strategy, which includes deforestation targets and cites REDD as a way to create an economic dynamic favourable to forests. It sets Brazil's first ever deforestation reduction target by aiming to slash deforestation by 70 percent by 2018. Following Brazil's direct funding approach, the National Plan does not create any rights to carbon emissions, and does not allow for offsets or the possibility of trading the carbon stored in its forests. The National Plan is based on a very participatory process by seeking to attain its reduction objectives via the support of both national and international financial resources. Furthermore, the National Plan calls for the implementation of the National Public Forests Register, which identifies public forests to be protected, preserved, and managed, and implementation of a satellite deforestation monitoring programme.

The Deforestation Plan provides for various measures for the valuation of forests to conserve biodiversity; improved forest management; the creation of 20 million hectares of conservation units; incentives for sustainable recovery of deforested areas; decentralized management and partnerships between federal, state and local governments; and the establishment of a legal framework for public forest management.[5]

2.2 The Federal Constitution of Brazil

The Brazilian Federal Constitution explicitly states that everyone has a right to an ecologically balanced environment. It imposes a duty on both the government and the community to defend

3 Plan drafted by the Permanent Interministerial Working Group to Reduce Deforestation in the Legal Amazon. This is a Federal Government Plan coordinated by the Office of the Chief of Staff.

4 On 11 December 2008, the Brazilian government organized a side event in Poznan to explain the National Plan on Climate Change and to present the Amazon Fund. On 1 December 2008, President Luiz Inácio Lula da Silva initiated the National Plan on Climate Change, which includes a deforestation provision but excludes the possibility of trading forest carbon.

5 Baker & McKenzie. (2009). "Background Analysis of REDD: Regulatory Frameworks", p. 51. *Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Sydney, Australia: Baker & McKenzie.*

and preserve the environment for present and future generations.[6] Forests are considered to be national wealth and a common asset for all inhabitants.[7] This includes the Amazon Forest, among other biomes, which is declared part of the national heritage. Furthermore, it states that unoccupied lands or lands seized by the states through discriminatory actions which are necessary to protect the natural ecosystems are inalienable.[8]

The shared responsibility of all levels of government regarding environmental protection is explicitly stated under the common powers provision of Article 23, which articulates that it is commonly incumbent upon the Union, the states, the Federal District and the municipalities to protect the environment and fight pollution in any of its forms, and to preserve the forests, fauna and flora.

With respect to indigenous peoples, Article 231 recognizes the Indians' right to land that they traditionally occupy, that these lands are intended for their permanent possession, and that they have exclusive rights over the "riches of the soil, the rivers and the lakes existing therein". It adds that these lands are inalienable and indisposable, and that the removal of indigenous groups from their lands is forbidden, with certain exceptions.[9]

2.3 Land tenure and forestry law

There is extensive legislation regulating forests and land tenure in Brazil. Private land ownership is permitted by the Constitution guaranteeing the right to property.[10] The existing legal framework in Brazil enables land users to obtain legal title (*usucapião*) over land that they have developed through their own work, and have made productive for five uninterrupted years.[11] Brazil lacks a central land register, and it is believed that only four percent of private land in Amazonia is covered by secure title deeds; much of the rest is being grabbed in the hope of eventually establishing *de facto* ownership.[12] Furthermore, the occupancy of public lands in the Amazon has also been marked with widespread irregularity.

The Brazilian *Forestry Code*[13] echoes the Constitution declaration that forests on national territory are goods of common interest to all inhabitants of the country.[14] The Code governs forest management and outlines the procedures for forest conservation as well as the conservation of natural resources in national forested areas, including both private and public lands.

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6 Federal Constitution of Brazil of 2006, Article 225.
7 *Ibid.*
8 *Ibid.*, Article 225, para. 5.
9 *Ibid.,* Article 231.
10 *Ibid.*, Articles 5 and 170.
11 "The person not being the landowner of rural or urban property, having possessed it as his for five uninterrupted years, without opposition (if rural property with an area less than 50 hectares), making it productive through his own or his family's work, having it as his home, will acquire its formal ownership". Translation of Art. 1239 of the Law n 10406/2002: from Ogonowski, M. *et al.* (2009). "Utilizing Payments for Environmental Services for Reducing Emissions from Deforestation and Forest Degradation (REDD) in Developing Countries: Challenges and Policy Options". Washington DC, USA: Center for Clean Air Policy.
12 The Economist. (2009a). "The Brazilian Amazon: Preventing Pillage in the Rainforest". (26 February 2009).
13 Lei n. 4.771, de 15/09/1965. *Novo Código Florestal.*
14 *Ibid.*, Article 1.

The use of natural forest resources on private land is permitted by the landowner, making him the provider of ecosystem services on the property, subject to certain limitations imposed by the Code. All rural properties are required to have two types of protected or conserved areas. First, Permanent Preservation Areas are areas within public and private properties that have important environmental functions. Secondly, landowners must keep 80 percent of their forest land as a *Reserva Legal* (legal reserve).[15] This land can only be exploited with an authorized sustainable management plan (MP).

Public lands are administered by the Union, states or municipalities in the interest of the common good. On public land, concessions may be allocated under the *Law on the Management of Public Forests*.[16] This law manages publicly owned forests and guarantees the allocation of areas to be managed by local communities. The law establishes a forest concession system that governs the allocation of timber concessions by conceding rights to manage public forests sustainably for the exploration of products and services which are allocated through an open bidding process.

Under the Constitution, indigenous land is the property of the federal government.[17] Although the land and the natural resources deriving from these lands are the inalienable property of the Union, indigenous communities have exclusive rights to the use of the land and resources.[18] The Statute also grants permanent tenure of lands traditionally occupied by Indians.

Under Federal law, if the forest people are not included in the REDD scheme they do not lose their rights to access natural resources on the land. Under the Indian Statute, indigenous communities have a right to the use of the resource without being the owner. Furthermore, the law allows indigenous communities the right to derive income from the resource without being the owner of the land. Article 43 of the Statute states that indigenous income is the result of the application of the goods and utilities (services) of the indigenous patrimony. The revenue is, of preference, used to benefit the community.

2.4 The protected area system

In Brazil, PAs are regulated by the National System of Conservation Units (NSCU),[19] a unified system encompassing all federal, state and municipal protected areas. Primarily destined for conservation, Conservation Units are another type of land in Brazil, which can include both public and private land, and serve as another tool to combat deforestation.

The system includes 12 management categories divided into two groups of PAs: those under full protection and those allowing sustainable use of the land's resources. Protected areas under full protection are areas in which only indirect use of natural resources is allowed. These include:

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15 The percentage of forested area is "established according to the percentage of rural property areas in which forests shall be preserved for the purpose of sustainable forest management. This percentage varies between 20 percent and 80 percent of the rural properties" (with 80 percent in the Amazon Forest). Art. 16, Law 4771/1965, *Forestry Code.*

16 Lei no.11.284/2006 de Gestão de Florestas Públicas (Law for sustainable management and production of forests).

17 Federal Constitution, *supra* note 8, Article 20(10).

18 *Ibid.*, Article 231, para. 2. ". . . exclusive usufruct of the riches of the soil, the rivers and the lakes existing therein".

19 Lei no. 9.985, de 18/07/2000. *Sistema Nacional de Unidade de Conservação de Natureza*.

ecological stations; biological reserves; national, state or municipal parks; natural monuments; and wildlife refuges.

Protected areas under sustainable use are intended to allow nature conservation and the sustainable use of natural resources. They include extractive reserves; sustainable development reserves; national, state or municipal forests; fauna reserves; environmental protection areas; areas of relevant ecological interest; and natural heritage private reserves.[20]

Extractive Reserves and Sustainable Development Reserves allow income-generating activities. However, for such activities to be legally allowed there must be an approved MP elaborated with the participation of the local inhabitants. The Juma Project, a sustainable development reserve, is an example of a carbon PES project currently underway in which traditional communities can benefit from carbon project development.

2.5 State-level approach

At the sub-national level, States have also implemented their own climate change policies. The *Law for the State Policy for Climate Change,*[21] adopted by the Amazonas State, is the first of these. The law promotes the creation of market instruments as well as the regulation of REDD schemes. The law also puts forward a state climate change fund "to pay for environmental products and services, including those provided by forest peoples preserving their environment and reducing deforestation".[22]

3. Carbon ownership

3.1 Ownership of payment for ecosystem services

Although there are a number of instruments that provide PES, no national policy for PES is in place. Brazil currently recognizes neither the legal concept of environmental services and their economic value, nor the conservation roles of landowners. Nevertheless, the Federal Constitution gives everyone the right to an ecologically balanced environment.[23] In addition, the Brazilian *Forest Code*[24] declares forests as natural heritage and establishes common rights for every inhabitant of the country. Together, these provisions imply that the State is the owner of ecosystem services for the common good.

The lack of a legal definition for PES was attributed to the modest success of the *Proambiente* Programme[25] – the government's attempt to provide a system of PES rendered by small producers – which it had hoped to use as a model for the introduction of a national PES system.

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20 Capobianco, J.P. (2009). "Brazilian Protected Areas and Climate Change". World Wildlife Organisation.

21 State of Amazonas, Laws for the State Policy for Climate Change, (2007), (*Lei da Política Estadual de Mudanças Climáticas,* PEMC-AM) *Law no. 3135* (dated June 5, 2007).

22 Baker & Mackenzie, *supra* note 5, p. 19.

23 Federal Constitution, *supra* note 6, Article 225.

24 Lei n. 4.771, *supra* note 13.

25 Hall, A. (2008). "Better Red than Dead: Paying People for Environmental Services in Amazonia". *Phil. Trans. R. Soc. B.* 363(1498): 1925–1932.

A National Policy for Ecosystem Services and a Payment for Ecosystem Services Programme are currently under discussion. If approved, six substitute bills[26] would establish the concept of PES in Brazil, and would institute a National Policy on Environmental Services to institutionalize PES amongst small-scale farmers, to be financed by international donations. The definition of environmental services in this bill was taken from the *Proambiente* Programme and includes REDD as well as carbon sequestration.

A third bill[27] to be introduced would attempt to secure permanent funding from the national budget and other domestic and international sources. These bills would together provide a legal and financial basis for expanding Proambiente into a national programme.

3.2 Ownership of natural resources

Protected areas are considered part of the public domain, and are therefore owned by the State. This means that forest peoples do not own the land, although some may have been living there for several generations. However, the State grants them the right to use the land, and they are responsible for the sustainable use of the land under the PA's MP.

By regulating access to public forests through the Brazilian Forestry Service, and providing financial support through the new National Fund for Forestry Development, the 2006 *Law on the Management of Public Forests* improves incentives to encourage sustainable productive activities. The law expressly prohibits the inclusion of terms in a forest concession which grant rights to commercialize credits from forestry concessions derived from avoided deforestation.[28] However, it leaves the right for states to commercialize credits from reforestation projects. As such, the right to sell carbon lies with the State.

While private ownership is permitted in Brazil, in practice, experience has created a complicated system of ownership, leading to insecure tenure and disputes over land ownership. Insecure tenure makes people vulnerable to being dispossessed, giving them less leverage in relations with government and the private sector.[29] As REDD initiatives may increase land values, this could accentuate the problem of dispossession.

Insecurity in land and forest ownership has undermined sound forest management as, without sound secure rights, forest users have few incentives to invest in protecting forest resources, leading to deforestation.[30] Without clear land title, one cannot prove land ownership and sell the forest's carbon. Furthermore, non-titled landowners can be evicted by more powerful stakeholders. Secure tenure is a critical part of forest governance as it can ensure the permanence of forests.

In an attempt to regularize title over public land in the Amazon, the *Terra Legal* Program (Legal Land Program, n. 11952/2009), was promulgated in June 2009. The new federal law is intended to set

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26 The proposed substitute bills are 792, 1.190, 1.667, 1.920, 1.999 and 2.364.

27 Projeto de Lei 792 (2007) introduced by Deputy Anselmo de Jesus (PT-Roraima) and Projeto de Lei 1190 (2007) authored by Deputy Antonio Palocci (PT-São Paulo).

28 *See* Law on the Management of Public Forests (Law no. 11.284), Art. 16, para. 1.

29 Cotula, L. and Mayers, J. (2009). *Tenure in REDD: Start-point or afterthought?*, p. 3. Natural Resource Issues No. 15. London, UK: International Institute for Environment and Development (IIED).

30 *Ibid.*

new norms to define property rights, and it aims to establish regulation of titles to 80 percent of the private landholdings in Amazonia over the next three years.

Until now, concessions on public lands to private individuals for rural use were limited to 500-hectare units. The new law grants title to all landholdings in the Amazon up to 1,500 hectares occupied before 2005 by donating plots of 100 hectares to people farming them, and selling plots of 100–1,500 hectares at a reduced price. Plots over 1,500 hectares will be reclaimed by the government, and further land claims will be banned. The plan will be implemented by the Ministry for Agrarian Development and INCRA, a federal agency charged with distributing small plots of land.[31]

Critics say the new law will place 72 percent of the land under the control of seven percent of the population who may farm the land, raise cattle, and may sell the land after three years.[32] Furthermore, it has been criticized as being a process of land privatization that condones ownership of illegally appropriated land by large landowners. Furthermore, some fear that this offer of free land may actually trigger deforestation in new areas, rather than curb the practice.

On the other hand, it is thought that the rectification of irregularly occupied public land in the Amazon may help efforts against deforestation. By establishing clearly defined property rights, it is hoped that without incentives to move further in to develop forest, occupants will stay and improve their land. In addition, once REDD schemes are established and funds are established, landowners will be incentivized to receive payment not to cut their trees, as opposed to moving to clear uncut forest. Furthermore, incorporation of more properties into a land register would make it easier to ensure landowners are abiding by the rules, and that benefits are distributed.

If the new law is signed into law, several factors will determine its contribution towards the success of REDD. First, implementation of the law must be efficient. INCRA, the agency historically in charge of distributing land in the Amazon, has a poor track record of helping out settlers. If the new legislation is going to incentivize people not to cut down trees, they must be provided with alternatives to their previous livelihoods.

Furthermore, illegal logging must be reined in. Under the current law, even though 80 percent of privately owned land is supposed to be dedicated to conservation purposes, this requirement is largely ignored by landowners. When regulators have tried to enforce the law, they have been met by strong resistance, and even violence.

3.3 State legal framework

Under the legal framework for the State of Amazonas, the natural resource owner is the State. The people have access to the natural resources for their own use, but the FAS are responsible for commercializing and managing them. In addition to granting use of the land to forest people, the Amazonas State legally transfers the right to commercialize and manage the products and services, including the carbon credits generated by standing forests to the FAS.

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31 The Economist (2009a), *supra* note 12.

32 World Rainforest Movement (WRM). (2009). “Brazil: New legislation allows agribusiness to advance in the Amazon”. WRM Bulletin Nº 144.

The State of Mato Grosso has also recently enacted a law *Establishing the Executive Directors for the Fund for Forestry Development of the State of Mato Grosso*.[33] Dealing with forestry management, this law regulates both title registration through a property registration system, and a land registry that records the physical characteristics of the land.[34] The law also requires the landholder or occupant to obtain a single environmental permit or licence which specifies the landowner's conservation rights and obligations. However, the law does not determine whether a landowner is entitled to the carbon sequestration rights by engaging in forest conservation activities on his land.[35] This ambiguity should be removed to provide clear incentives to landowners considering whether to engage in forest conservation as opposed to some other more unsustainable practice.

4. REDD obligations

Many countries support an international market-based initiative to generate funds for avoided deforestation. Brazil, however, advocates a voluntary fund-based approach as a forest protection tool. Under this approach, REDD projects would receive direct financing under the UNFCCC, based on national policy drawing upon international funds donated by industrialized nations. Contributors would not be eligible for carbon credits that could be used to meet emission reduction obligations. Unlike the direct-financing approach taken at the federal level, the State of Amazonas aims to finance its deforestation reduction initiatives through the international marketing of carbon sequestration credits.

On indigenous lands, the Constitution recognizes *usufruct* rights[36] of indigenous communities over the natural resources of their lands. Therefore, even though forest lands are owned by the State, these groups have permanent usage rights.[37] These rights are classified, as the real right to explore the utilities, uses and fruits of the resource or property which includes the legal right to use and derive profit generated from the resource. Additionally, the Brazilian Civil Code recognizes that "the person who possesses the rights to the usufruct of a thing also possesses the right to the possession, use, administration and receipt of the fruits".[38]

Given Brazil's policy on a voluntary, fund-based national approach to REDD, it is doubtful that indigenous peoples would be allowed to enter into REDD agreements or contracts with private entities. However, indigenous communities would be entitled to the income generated by payments for REDD activities, and can enter into REDD agreements/contracts with the State. This becomes vital for REDD projects.

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33 Lei Nº 8.723, de 23 de outubro de 2007 - D.O. 23.10.07. "Establishing the Executive Directors of the Fund for Forestry Development of the State of Mato Grosso". August 18, 2008.

34 Baker & Mackenzie, *supra* note 5, p. 54.

35 *Ibid*.

36 Law n. 6.001/73, Statute of the Indian, 1973. Article 24 defines *usufruct* rights as the right to the ownership, utilization and perception of the natural resources and all the uses and utilities existing on the lands they occupy, as well as the product of the economic exploration of such resources and utilities.

37 Ogonowski *et al.*, *supra* note 13.

38 Law No. 3071, *Civil Code of Brazil* of 1916, Article 718.

5. Framework for benefit sharing

At the time of publication, there was no national level framework for benefit sharing. While Brazil's 2000 National Forest Programme aims to increase people's participation in policy development, there is little information on formal benefit-sharing arrangements.[39] The *Amazon Fund* would be the most likely mechanism through which benefit sharing would occur. However the Amazon Fund is still not fully functional, and no concrete measures or policies are in place at the moment to clearly explain how benefit sharing would take place.

The Amazon Fund, which was launched in August 2008, is a private fund which aims to provide positive incentives for forest preservation through the voluntary conservation sponsorship contributions it receives from developed countries and the private sector for the reduction of deforestation. The amount available each year hinges on the reduction of deforestation below a rolling ten-year average.[40] In order to receive funds through the Amazon Fund a project must comply with five thematic areas: sustainable use of forests; land tenure and territory planning; public forests and protected areas; conservation and sustainable use of biodiversity; and recovery of deforested areas.[41]

At the State level, the State of Amazonas initiated the *Bolsa Floresta* Forest Conservation Grant Programme (*Bolsa Floresta* Programme) under the Amazonas State Law for Climate Change. The programme is managed by FAS, and was established to pay traditional communities and indigenous people for their role in the conservation of forests and their environmental services. The funds for paying the benefits come from the interest on the existing resources from the State Fund for Climatic Change.

Under the programme, participants are required to:

a) have lived on the State Conservation Unit for at least two years;

b) keep crop and pasture areas not larger than those of the year when the Forest Conservation Grant Programme was instituted;

c) if the families have children, they must be registered and regularly attend the school;

d) participate in a Community Dwellers Association;

e) participate in the construction and implementation of the Conservation Units and Management Plan, and;

f) participate in an introductory workshop and sign a Zero Deforestation Agreement. [42]

39 Cotula and Mayers, *supra* note 29, p. 30.
40 Baker & McKenzie, *supra* note 5, p.18.
41 Schwartzman, S. (2008) "Indigenous lands, Amazon conservation and REDD". WWF commissioned paper. World Wildlife Fund.
42 Decree n. 26.958/2007.

The *Bolsa Floresta* benefit-sharing mechanism has four components. First, a Family Forest Grant pays a monthly allowance of R$50[43] to the wife of each family living inside the PA that is willing to participate in the programme. Each family receives a direct cash payment through an electronic Visa card, which can be obtained from and used in banks and post offices, and aims to complement family expenses. Each family's details are registered, thus generating an important database for social environmental monitoring.[44] The payment is designed to involve the local population in activities to combat deforestation.

Second, a Forest Grant for Associations is granted to associations of people living in the PA. Payments for this allowance correspond to 10 percent of the total of Family Forest Allowances. The purpose of the Allowance is to strengthen organizational and social control under the programme. Payments are made directly to the association or through a local commercial credit. The resource use is based on a participatory budget discussed and approved within the families.[45]

Third, a Social Forest Grant of R$4,000 per year[46] is provided to each community. This allowance is designed to fund education, sanitation, health, communication and transportation initiatives. Projects under the allowance are decided by the community, and take place with the participation of the relevant government institutions collaborating with the project.

Finally, an Income Forest Grant of an average value of R$4,000 per year[47] is provided to each community. This allowance helps to support sustainable agriculture, forestry, cattle ranching, and gathering NTFPs. All legalized activities that do not result in deforestation or smoke generation are eligible. Other State government actions include putting in place, and allocating financial support to, the following four programmes: monitoring and law enforcement, social investment, community development, and PES.

Initiated under the programme, the Juma Sustainable Development Reserve Project aims to produce reduced deforestation carbon credits for sale internationally. It is Brazil's first REDD project to comply with the Climate, Community & Biodiversity Alliance (CCBA) Standard. Under the *Bolsa Floresta*, local communities receive 100 percent of the benefits obtained in the voluntary carbon markets. All revenues generated from the Juma project must be re-invested in the PA to implement its management plan. In other words, they must be turned into real benefits to the PA and reward the forest people and communities. Table 1 shows the breakdown of the overall project budget.

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43 R$ 2.20 = US$ 1 (April, 2009).

44 Fundação Amazonas Sustentável (FAS). (2009). "The Bolsa Floresta Program" (online overview of program). Available at http://www.fas-amazonas.org/en/index.cfm?fuseaction=conteudo&id=19. *See also* Fundação Amazonas Sustentável (Amazonas Sustainable Foundation). (2008). "The Juma Sustainable Development Reserve Project: Reducing Greenhouse Gas Emissions from Deforestation in the State of Amazonas, Brazil. Project Design Document (PDD)". pp. 71-72.

45 *Ibid*.

46 R$ 350 per family per year.

47 R$ 350 per family per year, based on the fact each community has an average of 11.4 families.

Table 1: The Juma Reserve REDD Project Investment Plan for 2008–2011

	R$	Percentage of the total
(A) Monitoring and law enforcement	1,414,560	29.75%
(B) Bolsa Floresta social investment	693,000	14.58%
(C) Community development, scientific research and education	2,322,500*	47.90%
(D) PES – Bolsa Floresta**	324,280	6.82%
Grand total	**4,754,340**	
**Section (D) Bolsa Floresta breakdown:		
Infrastructure/equipment	24,000	7.40%
Payment to the families	170,000	52.42%
Payment to the association	17,000	5.24%
Community Investment Plans	113,280	34.93%

Source: Fundação Amazonas Sustentável (2008), pp. 73–74.

**Note* – in the document, there was a discrepancy of 45,000 in the total for Maintenance Costs.

6. Information, participation and partnerships

The Constitution states that "all persons have the right to receive, from the public agencies, information of private interest to such persons or of collective or general interest…".[48] In 2003, Brazil passed its law on access to environmental information (Law No. 10.650 of April 16, 2003). The law applies to public agencies that have authority to implement the Brazilian National Environmental Policy Act. It requires these agencies to make public when asked to do so, or when necessary, all relevant information relating to environmental protection.

Brazil's Constitution imposes a duty on the government and the community to defend and conserve the environment for present and future generations. This imposes an implied duty to participate in preserving the environment, and could be extended to participation in the development of REDD projects.

It will be important to incorporate participation from indigenous groups or local communities, because they have a very important role to play in forest conservation. For instance, the National Foundation of Indigenous People (FUNAI) has extensive experience bringing tribes and communities together to implement conservation policies in the Amazon. Furthermore, if the State is going to persuade farmers to adopt sustainable forest practices, they must bring them into the planning process, and inform them of alternatives for their livelihood, and incentives for conserving trees.

48 Federal Constitution, *supra* note 6, Article 5, XXXIII.

The Juma Project may be a good indicator of how future REDD projects will incorporate participation. The PA was created using participatory workshops and public consultations conducted by the FAS and SDS in order to guarantee the involvement and commitment of all local stakeholders, and to ensure their access to information. Furthermore, the Project will set up a Reserve Management Council,[49] which will be formed by community representatives, local stakeholders and governmental and non-governmental institutions. Its role will be to decide on the reserve's programmes and activities, to approve the annual operational investment plan, and together with the State Secretariat of Planning and Economic Development (SEPLAN), it develops the reserve's MP.

Families who want to benefit from the FAS can participate in a Community Association, therefore allowing them to exert collective influence on project activities and plans. In addition, the Deliberative Council for the Juma Reserve will play an important role in the management of the Reserve and in public decision making. This council will be formed with the participation of different actors, including local communities, authorities and civil society,[50] and it will be responsible for the major decisions concerning the project area.

7. Additionality

There is no national agreement on how to measure the additionality for REDD. Furthermore, a definition of rules at the national level is quite improbable, because of the large variability between national biomes. Such rules are more likely to be developed on the state level, and will depend on more detailed studies and discussions considering specific local deforestation and forest degradation drivers. The definition of these rules is expected to materialize together with UNFCCC efforts to create an international legal basis to promote REDD projects.

According to the deforestation simulation model "SimAmazonia I", the State of Amazonas could lose up to 30 percent of its forest cover by the year 2050 under "business as usual" (BAU) development patterns. The Juma Project uses the SimAmazonia I simulation as its baseline scenario, and subtracts from that projection the avoided deforestation of the Juma reserve area for each year up to 2050, when the project is supposed to end. In the absence of the project, the SimAmazonia I model forecasts the deforestation of 75.4 percent of the reserve. Therefore, the additionality and the generation of carbon credits from the reduction of carbon emissions from deforestation is defined by comparison with the BAU scenario since the creation of the Juma reserve in 2006.

Nevertheless, the concept of additionality will probably vary from state to state, and for different types of forest area. In Brazil the risk of leakage is high, because the sheer size and remoteness of the Amazon makes it hard to track forest activities. One way of mitigating this problem is to register titles to keep subsistence agriculture from creeping further into the forest. Furthermore, incentives to participating in PES schemes such as the Juma Project, where participants register their land with the project, can help with monitoring.

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49 Lei n. 9.985, *supra* note 19, Article 20, para. 4.

50 Amazonas. Lei Complementar n. 53, de 05/06/2007. *Sistema Estadual de Unidades de Conservação Amazonas*, Article 5, Chapter V, para. III.

Another risk is that people might move outside a PA in order to engage in unsustainable forest practices. Recent studies on deforestation dynamics indicate that the single measure of creating a PA promotes a reduction of deforestation in the surrounding areas, due to the improvement of monitoring and governmental inspection activities, and to the increased orientation of local communities regarding the legal use of the forest. This effect was observed in the great majority of PAs created in the Brazilian Amazon, and the offsite "reduction of deforestation" that was generated varied from one to three percent of the size of the PA (Amazon Environmental Research Institute (IPAM), 2008)).

Inside the Juma Reserve, the entire surrounding area is monitored by the State and Federal Government as part of the project's monitoring plan. This includes monitoring migration from the communities inside the Juma Reserve to other forest areas, as well as immigration. Furthermore, the 10 km "buffer zone" surrounding the Reserve's perimeter[51] is included in the Reserve's MP. As such, all communities inside this area receive the same benefits from the Forest Allowance Programme applied inside the Reserve. This not only decreases incentives for inhabitants to move outside the PA, but it also creates incentives for communities not covered within the PA's boundaries to participate. Furthermore, as a mitigation measure to guarantee that the off-site carbon stocks will not decrease, the project will commit to an investment in environmental education, health and improvement of environmental monitoring of at least 10 percent of the annual budget generated through the sales of REDD credits. As a result, the project is expected to additionally reduce deforestation outside the project boundaries, as compared to the baseline scenario. The timeframe of the project is 44 years with a review of the baseline in 2016. The crediting period began in 2006, when the boundaries of the project were defined, and ends in 2016.

8. Conclusions

The importance of the Amazon in the fight against global warming cannot be understated. Furthermore, Brazil is in a very good position to benefit economically from market and voluntary-based conservation measures to protect its forests. However, Brazil faces many hurdles on its way towards developing a coherent REDD policy. Given its enormity, policies that work in one area may not do so in another. Reforming land title, a large driver in historical deforestation in Brazil, has been tried before but has not succeeded. In addition, because of the many diverse indigenous groups that will be affected, Brazil's government will need to be aware of customs and cultural differences, as well as the needs of different communities. If federal and state policies acknowledge this diversity, and bring individuals to the table to address the needs of local communities, they better the chances of curbing deforestation.

51 The area is at least 494,318 hectares.

Case Study: Cameroon

Nchunu Justice Sama and Electha Bih Tawah*

1. Origin and background of REDD in Cameroon

It is estimated that Cameroon has approximately 22 million hectares of forest resources within its territory.[52] However, it is also estimated that around 200,000 hectares of forest are lost annually due to deforestation. Recognizing the economic incentives it could receive by conserving its forests from deforestation and degradation, Cameroon has been an active advocate for REDD.

The first pilot REDD project in Cameroon was initiated by the German company GAF AG in 2007 as a prototype project for the Central African Forest Commission (COMIFAC), and will run until 2012. The main issues being addressed include estimation and monitoring of deforestation and degradation, carbon stock estimation, and the creation of a national REDD Steering Committee. The project is being carried out principally in Yaoundé and Ebolowa.

A variety of key stakeholders have taken part in the pilot project. International organizations and agencies have provided technical and financial support. The national government of Cameroon is represented by the Ministry of Environment and Protection of Nature (*Ministère de l'Environnement et de la Protection de la Nature* – MINEP), which hosts the Ecological Monitoring and Control Unit, and is also the national UNFCCC focal point. Furthermore, there are several indigenous groups that reside in REDD forest project areas in Cameroon including the Pygmies and the Bantus.

The German Development Bank (KfW) is also currently conducting a feasibility study for a REDD project in the forests of Mount Cameroon in the Southwest Region of the country. The study, conducted by GFA Envest,[53] is evaluating the threat of permanent deforestation to the region, identifying the drivers of deforestation, screening appropriate mitigation strategies and developing a baseline scenario. At the end of the study, recommendations will be made for further action by KfW. The Mount Cameroon region is under serious threat of deforestation by local villagers wanting to establish cash crop plantations and exploit the tree *Prunus africana*. The REDD project will finance the administration of Mount Cameroon National Park, which is currently being established.

Under the Cameroon Readiness Plan Idea Note (R-PIN), private individuals and civil society organizations (CSOs) may subsequently initiate local REDD projects. The government of Cameroon, through MINEP, submitted the R-PIN to the Forest Carbon Partnership Facility on 31 August 2008. In addition, Cameroon has begun implementing field projects in conjunction with various organizations.

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* Foundation for Environment and Development, Northwest Region, Cameroon.

52 Awung, W.J. "Underlying Causes of Deforestation and Forest Degradation in Cameroon". World Rainforest Movement.

53 GFA Envest is a Hamburg-based (Germany) climate and energy consultancy for international project-based mechanism work under the Kyoto Protocol.

2. Existing legal and policy framework

Presently, there is no legislation governing REDD in Cameroon. However, the pilot project is governed by various existing national policies, legislation, climate change strategies and international instruments. Various aspects of natural resource management including forestry are regulated by the environmental impact assessment (EIA) laws,[54] and the 1994 *Forestry Law*.[55] Environmental management is regulated by the 1996 *Framework Law on Environmental Management*.[56] There are also other resource-specific laws that regulate environment and forest management such as the 1998 *Water Law*,[57] the 2001 *Mining Code*,[58] and the 1998 *Tourism Law*.[59] The management of national and State lands in Cameroon is governed by the Land Tenure laws.[60]

Pending elaboration of a national REDD policy, most laws applicable to REDD in Cameroon draw inspiration from international instruments. The UNFCCC, the CBD, the Kyoto Protocol and other multilateral environmental agreements (MEAs) are applicable in Cameroon by virtue of Article 45 of the 1996 *Constitution*,[61] which provides that duly approved or ratified treaties and international agreements shall override national laws.

Cameroon's 1994 *Forestry Law* classifies forests into different categories. Under section 21,[62] Permanent Forest Domain is made up of State Forest and Council Forest. State Forest is classified under two main groupings, namely: *areas protected for wildlife*, such as national parks, game reserves, hunting areas, and wildlife sanctuaries; and *forest reserves proper,* such as production forests, protection forests, teaching[63] and research forests, plant life sanctuaries, botanical gardens, and forest plantations. Council Forest, under section 30(1), is any forest classified on behalf of, or planted by the council.[64] The pilot REDD project was initiated within a Permanent Forest Domain.

Land ownership is regulated under the 1994 *Forestry Law*. Part I, Section 7 states that "the State, local councils, village communities and private individuals may exercise on their forest and aquacultural establishments all the rights that result from ownership subject to restrictions laid down in the regulations governing land tenure and State lands and by this law". Ownership is determined by the *Land Tenure Ordinance* (Article 1 of Decree No: 76-165),[65] which states that "The land certificate shall

54 Decree No. 2005/0577 /PM of 23 February 2005, Arête No. 0070/MINEP of 22 April 2005, Arête No. 0001/MINEP of 3 February 2007, all on EIA.

55 Law No. 94-01 of 20 January 1994 to lay down Forestry, Wildlife and Fisheries regulations (1994 *Forestry Law*).

56 Law No. 1996/12 of 5 August 1996 relating to environmental management in Cameroon (1996 *Framework Law on Environmental Management*).

57 Law No. 98/005 of 14 April 1998 on Water Resource Management in Cameroon (1998 *Water Law*).

58 Law No. 001 of 16 April 2001 to lay down the mining code (2001 *Mining Code*).

59 Law No. 98/6 of 14 April 1998 on Tourism in Cameroon (1998 *Tourism Law*).

60 Ordinance No.74-1 of 6 July 1974 to establish rules governing land tenure and Ordinance No. 74-2 of 6 July 1974 to establish rules governing state lands (1974 Land Tenure laws).

61 Law No. 96-06 of 18 January 1996 pertaining to the Constitution of the Republic of Cameroon.

62 1994 *Forestry Law*, *supra* note 55.

63 A teaching forest is a forest where students specializing in forestry sciences carry out practical work.

64 A council is a decentralized local authority. It is in fact the local government authority (Law No. 2004/018 of 22 July 2004 governing councils).

65 Decree No. 6-165 of 27 April 1976 to establish the conditions for obtaining land certificates as amended and supplemented by Decree No. 2005/481 of 16 December 2005.

be the official certification of real property rights". Under this requirement, without a land certificate one cannot claim ownership of real (forest) property no matter how long one has been living on the land. All unregistered lands are classified as national land, and are managed by the State.

Cameroon's land-tenure laws create a certain degree of uncertainty regarding land ownership and tenure rights. In particular, customary title to land is not recognized under the *Land Tenure Ordinance*. This is problematic, because most forest people depend on customary rights over land for their livelihood and survival.

Customary rights are recognized under the 1994 Forestry Law. Section 8(1) states that "Within the context of this law, logging or customary right means the right which is recognized as being that of the local population to harvest all forest, wildlife and fisheries products freely for their personal use, except the protected species". However, it precludes any sale of those products. Furthermore, the right does not relate to the land.

Ironically, section 17 of the *Land Tenure Ordinance* gives customary communities occupying or using land since August 1974 the right to occupy or use the said land, and to apply for a land certificate. However, these rights do not amount to ownership, nor do they guarantee perpetual use of the land. The requirement for obtaining a land certificate is also at variance with the idea behind customary rights of communal ownership. Moreover, obtaining land certificates is expensive, complicated and subject to corrupt procedures. Therefore, forest dwellers and other relevant stakeholders often cannot afford land certificates, either as individuals or as a community.

Under the 1994 *Forestry Law*, forest people still maintain their logging rights even if they are not included in REDD programmes.[66] Section 26(1) states that "The instrument classifying a State forest shall take into account the social environment of the local population, who shall maintain their logging rights". This implies that it is obligatory to consider the social and environmental interests, and logging rights of forest communities in the classification and exploitation of any State forest. Under section 26(2), if it is determined that stripping forest people of their logging rights is in the interest of the project, they are entitled to compensation.

Section 30(2) states that "The classification instrument shall determine the boundaries and the management objectives of such forest which may be the same as for a State forest, as well as the exercise of logging rights by the local population…". This provision preserves the logging rights of forest communities in any Council Forest which is the subject of a REDD process in Cameroon. The boundary of any such Council Forest must be well defined, and the local population in the forest being classified will be allowed to continue accessing the natural resources for their livelihood.

Protection of human and customary rights of forest-dependent people in Cameroon needs to be better developed. In most cases, titles to land are either ignored, insufficiently recognized, or subject to abuse. To attain REDD's objectives, the State should take adequate measures to ensure involvement of forest-dependent people and all other relevant stakeholders in the implementation of the mechanism at both national and local levels. At the very least, it is of vital importance that forest peoples be allowed continued access to natural resources, and to exercise their rights of ownership. Forest peoples should be made aware of the importance of the REDD project, and educated towards

66 1994 *Forestry Law*, *supra* note 55, Part 111 CAP 1.

building capacity to exercise sustainable management strategies for exploitation.[67] Otherwise, indigenous and forest peoples may resist the project for fear that it will violate their land rights, and threaten agricultural practices, cultural diversity and traditional livelihoods. Therefore, an amendment of the current land tenure law to recognize customary and communal land ownership rights will be ideal for the REDD process.

3. Carbon ownership

3.1 Ownership rights

Under section 12 of the 1994 *Forestry Law*, all genetic resources of national heritage belong to the State. This implies that the State is the owner of all genetic resources as part of the general ecosystem. All fresh waters within the national territory are owned by the State according to the 1998 *Water Law*. Furthermore, section 2 of the 2001 *Mining Code* nationalizes all mining resources and gives ownership of same to the State except where individuals have land certificates.

The question of who owns the natural resources storing carbon generally depends on the type of forest in which the REDD project is being implemented. If it is a State or communal forest, the resource is owned by the State as provided by the 1994 *Forestry Law*. If the project is being carried out in a Council Forest, under 32(3)[68] the natural resource therein belongs to the Council. Natural resources found within a private forest are owned by the individual as defined by section 39(1) of the 1994 Forestry Law as read with the 1974 *Land Tenure Ordinance*. However, ownership over natural resources in private forests is limited by paragraph 5 of section 39, which states that forest products defined under section 9(2)[69] found in natural forest on private land are the property of the State.

There is no distinction between rights over the tree storing carbon and the carbon itself. Cameroon's legal system does not make a distinction between trees and the elements (e.g., carbon) stored in them. It is possible that REDD policy in Cameroon will address this issue given the advantages REDD would likely bring the country (i.e., carbon credits).

Cameroon has no regulation on carbon ownership *per se*. The carbon credit as a matter of fact should be owned by the owner of the land. Given that there is no distinction between the owner of the carbon and the resources, the owner of the carbon credit may, by implication, be the owner of the resources that store the carbon. However, it will be difficult to determine who owns the carbon credits when land tenure is not clearly established. This uncertainty poses a potential threat to those

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67 An example is the case of the Kilum-Ijim Mountain Biodiversity Conservation project. The Kilum-Ijim Mountain forest in the Northwest Region of Cameroon falls within the montane ecosystem and is very rich in natural resources which are sources of livelihood to the local communities. The government of Cameroon, in its effort to maintain the natural biodiversity of this mountain forest, entered into a contract with the NGO BirdLife International to conserve the Kilum-Ijim mountain forest. This decision was taken without involving the inhabitants and they were all asked to quit the forest, especially those who grazed their animals there. As a result, the decision was never implemented due to resistance from the local population.

68 1994 *Forestry Law*, *supra* note 55, Article 32(3) states that forest products of all kinds resulting from the exploitation of council forest shall be the sole property of the council concerned.

69 *Ibid*., Section 9(2) classifies various products or resources as special and thus as belonging to the state: namely, ebony, ivory, wild animal horns, certain plants and medicinal species.

whose rights have not been clearly defined. Most forested areas in Cameroon are still considered to be national land despite centuries-old claims by local or indigenous people, albeit without formal title. Under this legal framework, most carbon credits realized from REDD will probably go to the State.

Under the R-PIN for Cameroon prepared by MINEP, forest inhabitants constitute one of the major groups of actors in the REDD process, given that they are direct custodians of forest upon which they live, depend and exploit. As a Party to the CBD, Cameroon has a duty under Articles 8 (j) and 10 (c) to protect invaluable indigenous traditional knowledge, and cultural use of forest and forest resources. Therefore, Cameroon has recognized that success of REDD depends largely on forest dwellers. However, strict implementation of existing land-tenure law will invariably prevent forest peoples from participating in REDD.

Forest peoples must be included in the process if they are to better appreciate the objectives and importance of REDD. Furthermore, land-tenure law needs to be redefined to provide incentives for local peoples to engage in forest conservation. Otherwise, excluding forest people will be detrimental to REDD objectives, given that local or indigenous peoples in Cameroon have always perceived conservation projects as interfering with their ownership rights. The Kilum-Ijum Mountain Biodiversity Conservation project is an example.

3.2 Obtaining concessions for carbon-related ecosystem services

The process for obtaining concessions for carbon-related ecosystem services will depend on the type of ecosystem service concerned, whether it is for mining, forestry or hunting game. As mentioned above, there is no specific legal framework for REDD projects in Cameroon. However, there is specific natural resource legislation regulating concessions over those resources. The law regulating forest concessions is one example.

The procedure and requirements for allotting forest concessions is spelled out in Decree No: 95/531-PM (the 1995 Decree).[70] Forest concessions are only granted to natural persons residing in Cameroon, or to companies whose registered offices are in Cameroon and whose shareholders are known to the forestry service. Granting a concession is preceded by a public call for tenders. An inter-ministerial committee pre-selects and classifies bidders using the following criteria, and considering the minimum limits previously set by the Minister of Forestry in the call for tenders (the limits here are fixed by the minister and is not explained in this law): investments envisaged; financial potential, including the guarantee of good performance (criteria of good performance are determined by the committee); technical and professional capacities; and how well the term of previous contracts in the same domain were respected.

The Minister then signs a provisional exploitation contract with the successful bidder upon proof of having paid the requisite fee into the Public Treasury. The provisional exploitation contract has a maximum duration of three years, and is not renewable. Once the provisional contract is concluded, the owner of the concession must develop an inventory, a schedule and a five-year management plan under technical control. Once these obligations are fulfilled, the Forestry Service issues a certificate

70 Decree No. 95-531-PM of 23 August 1995 to determine the conditions of implementation of forestry regulations.

of conformity with the specifications of the provisional exploitation contract. The owner can then apply for a permanent or final exploitation contract. The final exploitation contract takes the form of a forest concession granted by decree of the Prime Minister. The final exploitation contract is valid for 15 years, and is renewable.

These requirements do not prevent forest people from participating in the REDD process, as forest concessions do not in any way confer a right of ownership over the corresponding land, even though the area over which the concession is granted is reserved for the licensee. In addition, the requirement for an EIA for such a project can promote the participation of the forest people in the concession process, because the EIA legal process makes public hearings and consultations with the affected communities mandatory. Their views and opinions must be considered before a decision is taken to commence the project, because of the anticipated environmental impact. The EIA must be accompanied by an environmental management plan that gives the people the opportunity to participate further in the concession process.

The issue of who has the right to sell the carbon has not yet been defined in Cameroon. However, the sale of other forest resources may provide guidance. Once a contract or concession has been awarded, the person to whom the contract has been awarded has the right to exploit and sell resources that are specified in the contract. The right is transferable subject to certain conditions spelled out in section 75 of the 1995 Decree. The transfer must be authorized by the Forestry Minister upon a written application forwarded simultaneously by both the owner of the concession and the transferee. Where a concession owner does not follow these procedures, the transfer shall be cancelled, he may be criminally liable, and/or the approval document may be suspended or withdrawn.[71]

4. REDD obligations

With regards to the REDD pilot project initiated by GAF AG, and the Mount Cameroon REDD project initiated by KfW, the obligations of the various parties are not yet defined due to the fact that the projects are still undergoing feasibility studies, and because carbon has not actually been bought or sold.

One of the greatest challenges faced by forest people is that of uncertainty over land ownership, rights and access to natural resources. For instance, the 1994 *Forestry Law* provides for community forest management which allows village communities to apply for and obtain authorization from the government to manage their community forest under very stringent conditions. However, these procedures are extremely cumbersome and difficult for communities to go through (e.g., the need to develop a complicated management plan, writing annual reports and making inventories). This poses a major constraint to ownership and the prospective carbon-selling rights of the communities.

There is also the problem of unsustainable forest management. Companies with concessions often engage in reckless logging without regard to the specific interests of forest dwellers. In addition, development projects such as roads, dams and oil pipelines are constructed through forest zones without thought for their impacts on forest dwellers. Furthermore, forest people lack the capacity and basic knowledge to engage in contemporary forest management and sustainable development

71 *Ibid.*, section 130.

strategies. Thus, capacity building for forest communities will be fundamental for the success of REDD projects in Cameroon. It must also be kept in mind that transplanting western ideas of forest management may be not suitable and appropriate to the culture and lifestyle of forest dwellers.

5. Framework for benefit sharing

There is no developed framework for benefit sharing under REDD. However, through provisions of the 1994 *Forestry Law*, the 1995 *Implementation Decree*,[72] and the 1996 *Framework Law on Environmental Management*, the State plays a large role in benefit sharing. In addition, other international conventions (such as the CBD, the UNFCCC, the UN Convention on the Rights of Indigenous people, and the UN Covenant on Economic, Social and Political Rights) to which Cameroon is a signatory, provide guidance.

As of yet, no REDD projects in Cameroon have realized benefit sharing. However, the pilot REDD project in Cameroon initiated by GAF AG proposes benefit sharing at the national and international level. At the international level, the UNFCCC envisages benefit sharing through North-South and South-South transfers of technology. In Cameroon, this will take place through the organization of a workshop for technology transfer. Attendees will include government institutions such as MINEP, the Ministry of Forestry and Wildlife, the Ministry of Town Planning and Officials, and environmental and forestry NGOs.

At the national and local levels, benefit-sharing procedures are enshrined in the 1994 *Forestry Law*. Under this legislation, any economic and financial secondary benefits resulting from the exploitation of forest resources are subject to the payment of royalties to the State.[73] In turn, the State distributes benefits or royalties collected. From the total amount of money collected, 50 percent goes to the State, 40 percent goes to the councils, and 10 percent goes to the local population.[74] Secondly, the Act provides for the allocation of a village tax to the village communities bordering small forest concessions.[75]

In addition to these mechanisms, sections 50 and 61(3) and (4) of the 1994 *Forestry Law* require the project participant to undertake to carry out industrial installations, developmental works, and provide social amenities for the benefit of the local population. This includes construction of roads, bridges, schools, hospitals, and recreational facilities. These benefits go directly to the local

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72 *Ibid*.

73 Decree No. 96/642/PM of 17 September 1996, fixing the amount and the modalities of tax recovery and the rights of royalties and tax relative to the activities of forestry, states that the rate and conditions to the payment of royalties shall be laid down, to the prorate of their value, by an order of the minister in charge of finance upon proposal of the competent ministry.

74 These percentages come from the decrees which implement the provisions of the Act, as follows: Implementation instrument of the 1994 Forestry Law: Decree No 96-237-PM of 10 April 1996 which defines the conditions for the functioning of special funds provided in Law No 94 of 20 January 1994 to lay down forestry, wildlife and fisheries regulations. It mobilizes a proportion of current forest revenues and redeploys such funds into special forestry projects; DecreeNo.96/642/PM of 17 September 1996.

75 Oyono, P.R. (2004). “One step forward, two steps back? Paradoxes of natural resources management decentralization in Cameroon”. *Journal of Modern African Studies* 42(1): 91–111.

community and are not liable for tax. Such projects are supervised by the local government official in charge of forestry.

While the 10 percent share of revenues was originally meant to be paid directly to the village level, a joint arrêté (administrative decision) of the Ministry of Economy and Finance and of the Ministry of Territorial Administration (29 April 1998) provided for management by local governments at the regional level – thereby effectively recentralizing forest revenue allocation.[76] Furthermore, a widespread lack of implementation of these tax allocations to bordering villages has been reported.[77]

The 10 percent redistribution of profits due to local communities is often received by recognized government auxiliaries – chiefs, on behalf of their communities. This leaves many, particularly customary holders, out of the benefit-sharing process as they have little or no say in how funds are spent, and therefore benefit little from them. Equally, communities living inside or within three kilometres of national parks are unlikely to qualify for such direct payments as timber exploitation will never occur within their customary territories.[78]

In collaboration with the Ministry of Finance, the Ministry of Forestry negotiates the terms of benefit sharing. The percentage paid to the local community living around the State forest for development purposes is fixed by the *Finance Law*.[79] As such, there is no consultation process with the local community before fixing the amount. Before exploitation activities can begin, the community must be notified. The local administrative authority is required to hold a briefing meeting attended by the traditional authorities, the local technical officials concerned and the project participant. At the meeting, the community is notified of the amount it will be paid.

The 10 percent allocated to forest people is insignificant compared to what exploitation or logging companies (carbon investors) extract from the forest, and what they pay into the Public Treasury. Furthermore, despite State-imposed obligations to carry out developmental projects and provide social amenities, these obligations are not enforced. This leaves communities in a worse situation than before, because in addition to the irreversible environmental damage caused by the exploitation, they do not receive benefits to mitigate the damage. In addition, some companies exploit more than what is specified in their contract, both in terms of quantity and in species harvested. The situation is compounded by the fact that some State officials either connive with exploitation companies for corrupt reasons, or are shareholders in those companies.

No legal disputes have arisen under REDD, because most projects are still at the feasibility study phase. However, an administrative procedure (forum), a judicial forum (the courts), traditional authorities, and arbitration are all available for settling disputes stemming from natural resource exploitation. These avenues are provided for through environmental laws, forestry law and other natural resource

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76 Cotula, L. and Mayers, J. (2009). *Tenure in REDD: Start-point or afterthought?* Natural Resource Issues No. 15. London, UK: International Institute for Environment and Development (IIED).

77 Egbe, S.E. (2001) "The concept of community forestry under Cameroonian Law". *Journal of African Law* 45: 25–50.

78 Mbile, P. and Okan, D. (2009). *Achieving customary-statutory rights compromise in Cameroon's Forest & Wildlife Policies: Extending forest benefits sharing to communities living in wildlife protection zones and to indigenous groups in Cameroon. World Agroforestry Centre.*

79 Law No. 96/237/PM of 10 April 1996, fixing the modalities of the functioning of the special fund for Forestry, Wildlife and Fisheries.

laws.[80] There are also several sanctions available in case of failure to pay compensation under the benefit-sharing agreement.

Aside from alternative dispute resolution, the judicial process is neither independent nor efficient. As a result, an exploitation company may get away with non-payment. Effective dispute-resolution mechanisms should be addressed by REDD policies, especially with regard to payment of royalties by conservation projects and logging companies. Otherwise, REDD projects will attract resistance from local people for fear of being taken advantage of by carbon investors.

The strengths of the benefit-sharing process in Cameroon lie in the fact that the State plays a major role in negotiating with exploitation companies, and has all the means to ensure payment of agreed amounts. But in practice, the materialization of such initiatives has been weak.

However, weaknesses of the process include uneven distribution of benefits, and exclusion of the local population from negotiations. Local communities are usually dissatisfied with the amount awarded to them. Moreover, due to corruption, benefits scarcely ever reach the community. In developing benefit-sharing legislation for REDD, communities should be given the opportunity to outline their needs in terms of development and social amenities, especially with regards to REDD. Benefits should include training to provide forest dwellers with alternative means of making a living. Also, the 10 percent allocation of royalties to local communities should be revisited, and provisions for enforcement should be strengthened so that local communities actually receive benefits owed.

Lastly, with regard to eligibility to receive benefits, land ownership laws under the REDD scheme should be clarified and should recognize traditional title to land. All individuals that have a stake in the forest concerned (i.e., those who depend on the forest for their livelihood), not just individuals that have a valid title, should be considered in the benefit-sharing process under REDD. Clearing up uncertainty and providing better protection for customary rights could create more incentives for the participation of local communities. Conversely, if uncertainty remains or they are excluded, communities may have little incentive to protect forests.

6. Information, participation and partnerships

Public participation is vital for conservation, because it is the only means through which stakeholders and the local population have a say in the process. Laws on access to information in environmental matters in Cameroon have their basis in multiple international instruments. Under Principle 10 of the 1992 *Rio Declaration*, access to environmental information is vital to environmental and natural resource management.[81] In addition, Article 6 of the UNFCCC emphasizes access to information on climate change issues, including REDD.

Access to environmental information is enshrined in the 1996 *Framework Law on Environmental Management*. Article 6 obliges public and private institutions to inform local populations regarding environmental problems. Article 7 provides that "All persons shall have the right to be informed on

80 The 1996 *Framework Law on Environmental Management*, 1994 *Forestry Law*, 1998 *Water Law*, 1998 *Tourism Law*, 2001 *Mining Code*, 2003 *Biosafety Law* and the 1974 Land Tenure laws.

81 As aforementioned, ratified international instruments are made applicable in Cameroon by Article 45 of the *Constitution*.

the negative effects of harmful activities on man's health and the environment as well as on the measures taken to prevent or compensate for these effects". Furthermore, Article 9(e) articulates the right of every citizen to have access to environmental information.

In addition, the Law implements Principle 10 of the Rio Declaration. Article 9(e), paragraph 4 requires that "Decisions on the environment shall be taken after consultation with the sectors of activity or groups concerned, or after a public debate when they are of a general nature".

The preamble of Cameroon's constitution provides for public participation in environmental matters by mandating that it is the duty of all citizens to work for the protection of the environment. The 2005 EIA laws also declare public consultation and public hearings mandatory during the EIA process. Lastly, under Law No: 2003/006 of 21 April 2003, which establishes safety regulations for modern biotechnology in Cameroon, PIC is a prerequisite for carrying out any ecosystem services. REDD is one of such services, and as such is subject to PIC requirements.

Under the 1994 *Forestry Law*, public participation is required, especially within community forests. It requires national authorities to provide for the participation of all relevant actors in the definition and application of forest sector management policies. Such participation should involve all concerned entities such as governmental agencies, CSOs, the private sector, and communities and populations living in the forest where the REDD project is to be executed.

In reality, implementation of the above laws is lacking. Although well defined by statute, they are usually not enforced or recognized in most conservation projects. Furthermore, administrative bottlenecks, cost and corruption render access to environmental information very difficult or almost impossible for local and poor populations.

The pilot REDD project is a good example. From the initial stage of the pilot REDD project, very few local people have been involved, and the process has been run mostly by international organizations and NGOs. Little effort has been made to include local forest communities, national NGOs and CSOs. Although they are key players in the implementation of REDD, they were either not consulted or largely sidelined and relegated to the background. Many are not even aware of what REDD is actually all about.

This approach has been detrimental to the success of the REDD scheme because local communities have perceived it as interfering with their traditional rights of communal ownership of land. For REDD projects to succeed, all necessary stakeholders, especially CSOs and local populations, should be involved from the initial stages of each project.

Nevertheless, many important partnerships have been developed during the pilot REDD project. In order to drive the implementation of the REDD process, the Cameroon REDD Steering Committee was established. It is comprised of key governmental institutions, international partners and national NGOs. MINEP will chair the committee. The Forest Carbon Partnership Facility has also assisted Cameroon in developing and submitting the R-PIN. SNV, the Ministry of French Foreign Affairs, and the Center for International Forestry Research (CIFOR) organized a REDD information workshop in May 2008, bringing together all the stakeholders. Global Forest Watch assists the Cameroonian administration monitor forest exploitation using remote sensing and GIS, and intends to develop a cartographic and statistical database destined for forest resource users and managers.

7. Additionality

Under the REDD scheme in Cameroon, additionality requires activities claiming REDD credits to show that reduced deforestation rates would not have occurred in the absence of carbon finance. These activities include reduction of illegal logging, creation of more protected forest, elimination of "slash-and-burn" methods of farming (especially in forested zones), using alternative sources of fuel rather than fuel wood, and reducing incidences of forest fires.

Almost all the different types of forest have the potential for initiating a REDD scheme, particularly the Permanent Forest Domain, which is comprised of State and Council Forests. However, REDD schemes may also occur on Non-permanent Forest Domain, which is made up of communal forest, community forest, and forest belonging to private individuals, and which may be used for purposes other than forestry. Both these forest domains are potentially eligible because they are open to forest concessions and suffer high rates of illegal logging, especially the Non-permanent Domain.

REDD schemes can also be established in protected areas. Effective management of protected zones in Cameroon has been hampered by insufficient funding, corrupt government officials, and failure to enforce relevant forestry laws. As a result, illegal logging and other destructive activities take place in protected areas. REDD will provide a sustainable financing strategy for such areas, and will establish a market for environmental services such as carbon sequestration and biodiversity.

The concept of additionality does not change between the different types of forest. In Cameroon, REDD projects all share the ultimate goal of avoiding similar causes of deforestation and degradation whether in Permanent or Non-permanent Forest. These common causes include: illegal logging, overexploitation of the forest's natural resources by forest people who solely depend on the forest for their livelihood, forest fires, slash-and-burn methods of farming, and the granting of large, uncontrolled forest concessions to logging companies.

Strategies for avoiding or controlling leakage have not yet been put in place. However, there are fundamental principles of environmental law that hold sellers of carbon liable if leakage occurs. The Polluter Pays Principle (Principle 16 of the *Rio Declaration*) is applicable in Cameroon by various acts of national legislation, particularly the 1996 *Framework Law on Environmental Management*.[82] Section 9(c) provides that the polluter must shoulder costs resulting from measures aimed at preventing, reducing and combating pollution, and at the rehabilitation of polluted areas.[83] In addition, section 9(d) imposes liability for causing environmental harm, stating that "any person who through his actions creates conditions likely to endanger human health and the environment shall eliminate or cause the said condition to be eliminated in such a way as to avoid the said effects". It is essential that the spirit of these principles be reflected in REDD legislation through an analogous liability mechanism so that sellers and other stakeholders are encouraged to take all necessary measures to prevent carbon leakage.

The national government currently monitors and controls REDD projects through its Ministry of Forestry in conjunction with the World Resources Institute and Global Forest Watch. However, monitoring is not effective because it only covers the Permanent Forest Domain. Although it is more susceptible

82 1996 *Framework Law on Environmental Management*, *supra* note 56.

83 The polluter here under the REDD project is the seller.

to deforestation and degradation, the Non-permanent Forest Domain is not monitored. Additionally, Cameroon does not possess sufficient technical know-how or trained personnel to affect or monitor GHG emissions linked to the forestry sector. The local population is also not involved with the control and monitoring. It will be necessary to train personnel and members of the local population so they can participate in controlling and monitoring REDD projects in their area.

8. Conclusions

Although Cameroon possesses a good number of laws and policies geared towards reducing deforestation, these instruments are still insufficient, as is evident from the massive deforestation rate in the country. Stronger implementation of a more exhaustive legislation will be a fundamental step towards the development and successful implementation of REDD projects in Cameroon. Special attention should be given to participation of CSOs and local communities, redistribution of revenues, and cementing customary land rights. The objective should be to encourage local populations, the immediate custodians of Cameroonian forests, to maintain forest cover within the framework of sustainable management. If these legal, tenure, participation and enforcement issues are addressed, REDD can provide Cameroon with a unique opportunity to protect its very rich and vast natural forest and biodiversity. Despite the shortcomings of the legal and tenure system in Cameroon, current REDD projects under the feasibility studies carry great potential for success in Cameroon.

Case Study: Guyana

Melinda Janki*

1. Origin and background of REDD in Guyana

Guyana is a highly forested country. Approximately 85 percent of the country is forested, covering an area of 18.416–18.695 million hectares.[84] There is political support at the highest level for the conservation of Guyana's forests. According to President Jagdeo:

> ". . . we know that our pristine rainforest is a world class asset that is badly needed by the rest of the world in the fight against climate change. If we can find a way to deploy this rainforest to combat climate change without slowing down our national development or compromising our people's sovereignty over the forest, then I believe that we should be willing to play a part in global efforts to avert climate catastrophe. And if we do this, we can provide the world with badly needed reassurance that solving deforestation is possible."[85]

According to Guyana's Readiness Plan Idea Note (R-PIN),[86] the country's main deforestation drivers are:

- Harvesting of a limited number of prime commercial species with little emphasis on efficiency or on harvesting a broader range of species;
- Clearing forested areas for mining;
- Converting forested areas for agriculture;
- Infrastructure development such as roads.

Guyana's annual rate of deforestation is currently 0.1–0.3 percent. However, Guyana's Readiness Plan (R-PLAN) points out that "if incentives and governance are not directed to controlling deforestation and degradation, these rates and their associated emissions are expected to significantly increase".[87] The R-PLAN notes that, "Mining seems to be the single most major cause of degradation within the State Forest Estate. According to baseline information from 2008, approximately 24,428 hectares of forest was cleared due to mining activities".[88] Other national circumstances include pressures and opportunities caused by growing world demand for timber, and growing national and regional demand for agricultural products. Another threat stems from a proposal to upgrade an existing

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84 Republic of Guyana. (2008). "The Forest Carbon Partnership Facility (FCPF) Readiness Plan Idea Note (R-PIN)".

85 Guyana's Low Carbon Development Strategy (LCDS). (2009). "Launch of LCDS by President Bharrat Jagdeo".

86 Republic of Guyana, *supra* note 84.

87 Guyana's Readiness Plan (R-PLAN), p. 2.

88 *Ibid*., p.7.

road running from Lethem to Georgetown into a highway. This would increase problems of illegal immigration from Brazil, risks associated with illegal mining and uncontrolled timber exploitation, and would result in increased emissions from growing levels of transportation. Any such upgrade would be subject to an EIA in which these potentially negative effects would need to be addressed. A recent study, "Climate Change and Biodiversity Mainstreaming through Avoided Deforestation – Guyana Case Study", funded by the Inter-American Development Bank, highlights the threats to forest from inadequate management.[89]

There are currently no REDD projects in Guyana. However, Guyana intends to enter the carbon market, and it plans to have two million hectares funded through a REDD mechanism by 2020. In the meantime, the Guyana Forestry Commission (GFC) is taking steps to reduce emissions by working with Amerindian Communities under a Community Forestry Programme (CFP). The CFP's objectives are to reduce emissions from slash-and-burn agriculture, and to improve timber harvesting by introducing techniques for improved governance and better harvesting methods. Some success under the CFP has been reported, with three communities adopting techniques for reduced-impact logging, harvest planning and forest inventories.[90]

2. Existing legal and policy framework

Guyana is currently developing a policy framework for REDD. To prepare for participation in the World Bank's Forest Carbon Partnership Facility's (FCPF) Readiness Mechanism, Guyana has developed an R-PIN and an R-PLAN. Both documents contain general statements of Government policies aimed at improving readiness for participation in REDD, some of which include using FCPF funding to continue the GFC's efforts to reduce emissions. The underlying aim of these documents is to improve governance, monitoring and enforcement, reporting and verification, and to develop a strategy to reduce deforestation and conserve forests through the GFC. The R-PLAN should also produce a reliable estimate of carbon stock that will form the basis of sustainable forestry and improved monitoring. Both the R-PIN and R-PLAN are in their early stages, and funding is expected to be provided shortly. The R-PLAN was revised as of 1 June 2009 and approved by the World Bank.[91]

The Low Carbon Development Strategy (LCDS) is Guyana's most important policy document on climate change and REDD.[92] The basis of the LCDS is that forest conservation which meets international standards should not come at the expense of Guyana's sovereignty, or of the rights of the Guyanese people. As such, conservation should be promoted through acceptable and agreed economic incentives. The LCDS sets out how Guyana "can work within the emerging international partnership to provide the world with a model for how immediate action can stimulate the creation of a low-deforestation, low-carbon, climate-resilient economy".[93] Guyana maintains the position that

89 Stabroek news. (2009a). "Poor resource management a threat to Lethem to Georgetown road". 22 September.

90 The three communities in Guyana in which the CPF has had successful REDD interventions are Caria Caria, Orealla/Siparuta and the Three Friends Maria Elizabeth. *See* R-PIN, *supra* note 84, p. 5.

91 Guyana Chronicle Online. (2009). "World Bank approves Guyana R-Plan". 1 July.

92 Office of the President, Republic of Guyana. (2009). "A Low-Carbon Development Strategy: Transforming Guyana's Economy While Combating Climate Change".

93 *Ibid*., p. 11.

the forestry sector should be included in the global carbon trading system or a series of linked regional trading systems in order to generate funds for avoided deforestation. Each rainforest country, including Guyana, would be granted Assigned Amount Units (AAU), which would be equivalent to tradable sovereign allowances to emit carbon dioxide. Furthermore, the AAUs would need to be assigned in phases in order to avoid flooding the market. Under the LCDS, the Government aims to obtain transitional payments until Guyana can participate fully in a REDD scheme.

Guyana does not have any specific legislation for REDD. Therefore, until such legislation is passed REDD must fit within the existing constitutional and statutory framework.

2.1 The Constitution

Guyana's Constitution contains two provisions of particular relevance to REDD. Article 36 states that: "The well-being of the nation depends upon preserving clean air, fertile soils, pure water and the rich diversity of plants, animals and ecosystems". While this principle might not be legally enforceable, it does place some obligation on the Government to preserve Guyana's natural heritage, including its forests. Any REDD scheme should therefore be compatible with this principle, and should as REDD+ include the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks, as elaborated under the Bali Action Plan.[94]

Part 2 of the Constitution sets out the fundamental rights and freedoms of the individual. Article 149J(2) articulates the duty of the State as follows:

The State shall protect the environment, for the benefit of present and future generations through reasonable legislative and other measures designed to –

a) Prevent pollution and environmental degradation;

b) Promote conservation;

c) Secure sustainable development and use of natural resources while promoting justifiable economic and social development.

Although this section is intended to protect fundamental rights and freedoms of citizens, it imposes a duty on the State to balance economic activity with the duty to protect the environment. As such, a REDD scheme should promote sustainable development in harmony with forest conservation objectives. Sustainable development has also been recognized as a principle of international law in various treaties[95] and by the International Court of Justice.[96] A necessary part of sustainable development is the concept of inter-generational equity and the responsibility to future generations. Therefore, international law would be a useful guide for the courts of Guyana in interpreting sustainable development under Article 149(J).

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94 UNFCCC. "Bali Action Plan". Decision UN Doc. FCCC/CP/2007/6/Add.1./CP.13, Article 1(b) (iii).

95 *See, e.g.*, Sands, P. (2003). *Principles of International Environmental Law. Second Edition*, pp. 252–266. Cambridge, UK: Cambridge University Press.

96 International Court of Justice. (1998). "Cases: Gabcikovo-Nagymaros Project (Hungary/Slovakia)". 37 ILM 162. (J. Weeramantry writing "Throughout the ages, mankind has, for economic and other reasons, constantly interfered with nature. In the past, this was often done without consideration of the effects upon the environment . . . The need to reconcile economic development with the protection of the environment is aptly expressed in the concept of sustainable development".)

Furthermore, Article 142 of the Constitution protects interests in or rights over property. Under Article 142, *usufruct* rights held by Amerindian communities are treated as rights in the nature of property, and are also protected against a taking by the State. Therefore, any REDD scheme must not be set up in a way that diminishes these rights.

2.2 The 1953 Forests Act and 2007 Forests Bill

The forest sector in Guyana is governed by the *Forests Act* (CAP 67:01) of 1953.[97] This legislation provides for leases or grants (title) of State forests, and gives the lessee the right to sell forest produce subject to payment of a royalty. The grant holder, as owner of the forest, appears to have the right to sell forest produce without paying a royalty. The *Forests Act* grants the GFC authority to grant permission for exploitation of Guyana's forests.

In January 2009, the National Assembly passed the Forests Bill 2007 with various amendments.[98] While the Forests Bill has yet to receive assent from the President it is widely expected to become law. Therefore, its provisions are relevant for REDD proposals.

Although it does not mention REDD, the Forests Bill does create a new system of sustainable management for Guyana's State forests. The legislation also recognizes *inter alia* Guyana's international obligations including, for example, under UNFCCC, the Kyoto Protocol and the CBD. So far Guyana has been unable to meet its commitments under these agreements, partly because of a lack of funding.

Clause 6 gives the GFC authority to allow exploitation of State forests through concessions for various forest operations such as cutting and removing forest produce, operating saw mills, and developing infrastructure to support forest exploitation. These operations may be controlled through regulations and a code of practice.

Under the Forests Bill the GFC will also be able to issue concessions to carry out forest conservation and afforestation projects. Forest conservation includes "the preservation of forests for the purpose of carbon sequestration or any other form of environmental service". The Bill does not contain any further provisions regarding carbon sequestration so this would need to be addressed through regulations or amendments.

Furthermore, Clause 12 allows the GFC to enter into an afforestation agreement authorizing the other party to plant specified trees and plants in a specified area of State forest, and to manage the planted area in accordance with a management plan approved by the GFC. This could be a potentially useful part of a REDD scheme since afforestation would increase carbon storage in Guyana.

A related statute of concern with regard to REDD is a provision in the *Income Tax Act* (CAP 81:01), which provides land developers with tax deductions for capital expenditures incurred in clearing land and trees for development. This provision for a land development expenditure allowance is incompatible with REDD because it creates a market distortion which favours the destruction of

97 The *Forests Act* was amended in 1972, 1979, 1982 and 1997.

98 There is no official version of the amended bill. The author has used the official version of the original bill plus the Report of the Special Select Committee to ascertain the final clauses as approved by the National Assembly. An electronic copy may be downloaded from http://www.forestry.gov.gy/Downloads/Forest%20bill%202008.pdf but could contain inaccuracies.

forests over their conservation. Therefore, this provision should be repealed or it could undermine national policy to conserve the forests.

2.3 The Mining Act of 1989

With the exception of the coastal plain, Guyana is divided into six mining districts. As a consequence, State forests are located within mining districts. The Guyana Geology and Mines Commission (GGMC) has jurisdiction over all minerals in Guyana[99] and is authorized to issue mining permits in any mining district of Guyana.

The GFC has no jurisdiction over minerals in these forests, and the *Forests Act* does not exempt State forests from mining activities. Section 12 of the *Forests Act* provides that a lease, licence or concession in State forests granted under the *Mining Act* shall be subject to the provisions of the *Forests Act* except where such lease, licence or concession contains any provision to the contrary. However, this section has very little effect since activities authorized under the *Mining Act* must by definition require the clearing of forest, without the permission of the GFC. The only restriction appears to be contained in Section 14 of the *Forests Act*, which states that sales of timber are subject to payment of a royalty. However, this provision does not even address the question of conservation of forests.

Although Clause 5(1) of the Forests Bill imposes a general prohibition on using, occupying or damaging State forests, it does not adequately address the problem of mining in State forests. Clause 5(2)(c) specifically allows a person to exercise, in a State forest, any right, power or privilege conferred or imposed by a licence for mineral prospecting or mining issued under the *Mining Act* 1989. Technically, licences issued under the *Mining Act* 1989 are for large-scale operations only. The Forests Bill therefore expressly allows large-scale mining in State forests despite possible deforestation.

The majority of mining in Guyana is carried out through small-scale (mining claims) and medium-scale operations (permits). These operations are responsible for most of the deforestation and degradation in Guyana's forests. Under a strict interpretation of the Forests Bill, operations covered under mining claims and permits do not fall within the wording of clause 5(2)(c), implying that these operations are excluded from State forests. However, the rest of clause 5 allows a person to exercise any right, power or privilege conferred under the Forests Bill or "any other written law." Therefore, mining permits and claims authorized under the *Mining Act* 1989 would fall within this provision, and mining could continue unhindered within State forests. The only significant change made by the bill in relation to mining is that under clause 79 the GGMC would first have to consult the GFC. However, the GFC has no power to prevent mining activities in a State forest. These exceptions could have significant implications for REDD, because it will be difficult to make a credible case for payments under REDD if the agency in charge of the forests has no power to prevent mining, a major cause of deforestation.

The GGMC also authorizes exploration and production of petroleum. The Forests Bill protects the rights, powers and privileges of any person holding a licence under the *Petroleum (Exploration and*

99 *Mining Act* 1989, Section 13.

Production) Act 1986. Again, the GGMC merely has to consult the GFC, but the GFC has no power to regulate or control petroleum operations in State forests. As far as can be ascertained, there are currently no licences for petroleum operations in State forests. However, should any such licences ever be granted they would be inconsistent with the current proposals for REDD. Any proposed REDD scheme would probably require an amendment to the law to exclude mining and forestry from State forests.

2.4 Forests on State lands

Not all of the forests located on State lands have been declared to be State forests. Those forests located on State lands which have not been declared to be State forests fall under the jurisdiction of the Guyana Lands and Surveys Commission (GLSC), which is responsible for all public lands.[100] The President has the power to issue grants (titles) and leases over State lands.[101] The GLSC is responsible for granting licences for agriculture. Agriculture is the second biggest cause of deforestation in Guyana and in 2008 was responsible for the clearing of 21,903 hectares of forest.[102] The powers of the President and the GLSC under the *State Lands Act* are expressed to be subject to the *Forests Act* in order to avoid conflict between different uses in State forests. However the conflict between agriculture and conservation of forests on State lands remains in relation to forested areas on State lands that are not State forests. In order to have a secure legal basis for REDD the law should be amended to give conservation of the forests priority over agriculture,

2.5 Amerindian forests

Amerindians comprise 9.1 percent of Guyana's population. Furthermore, Amerindian communities are the largest private landowners in Guyana, owning approximately 14 percent of Guyana's land.[103] Amerindian lands are privately owned lands held under a title issued under the *State Lands Act*. Legal title is held in the name of the Amerindian Village Council, which has legal recognition as a corporate body.[104] Beneficial ownership of the land is held collectively by the community.

Amerindian communities own the forests on their land and are responsible for promoting the sustainable use, protection and conservation of resources on those lands.[105] Forestry on Amerindian lands is controlled by the Village Council. If a resident wishes to carry out forest operations that person must obtain permission from the Village Council. Furthermore, the individual must comply with conditions imposed by the Village Council. Where the individual is a non-resident of the Village, forest operations are prohibited unless two-thirds of the community gives its consent. Under Section 55 of the *Amerindian Act* 2006, forestry operations on Amerindian lands must comply with national legislation and therefore must meet the legal standards for sustainability and good governance which apply in State forests. The GFC also has an obligation to monitor forest operations for compliance.

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100 *Guyana Lands and Surveys Commission Act* 1999, Section 2.
101 *State Lands Act* (CAP 62:01), Section 3.
102 R-PLAN, *supra* note 87, p. 7.
103 For example the WaiWai community of less than 220 persons are the absolute owners of 2,300 square miles.
104 *Amerindian Act* 2006, Section 10(2).
105 *Ibid.*, Section 13(1)(f).

Unlike the GFC, Amerindian communities have legal authority to control mining within forests under their jurisdiction. Amerindian communities possess the power to veto small and medium-scale mining. Even if the GGMC authorizes mining on Amerindian lands, no mining can take place without the free prior informed consent of the community. The *Amerindian Act* 2006 requires adherence to a strict procedure for obtaining this consent.[106] Avoiding a conflict between mining and REDD is therefore within the control of the Amerindian community.

Amerindian communities can also veto large-scale mining. Although a veto can be overridden by the State in the name of the public interest, this would be extremely unlikely. The process is lengthy, requires public declarations from two ministers, and is subject to strict protections which do not apply to other private lands.[107] Furthermore, the community is entitled to challenge the State in court. The State also has an obligation to impose measures to protect the community. Under a REDD scheme, such measures could include restriction of mining activities in order to enable Amerindian communities to obtain payment for avoided deforestation.

A key issue for Amerindian communities has been to establish clear boundaries in order to prevent incursions by miners, loggers and other resource users, and in 1995 Amerindian leaders asked the Government to demarcate their titles. While government attempts to demarcate Amerindian titles were initially delayed as a result of opposition from a local NGO, the Amerindian Peoples Association, in recent years Amerindian communities have agreed to demarcation and subsequent agreement has resulted in the doubling of Amerindian land in three years.

2.6 Rights of non-owners

The only significant communities of forest dwellers are the several Amerindian communities who do not have title to the land which they occupy and use. It is expected that their land issues will be dealt with through the land claims procedure set out in the *Amerindian Act* 2006. The IIED states that the decision to grant an Amerindian land claim is "essentially arbitrary, patronal, non-transparent, and with no effective possibility of appeal against refusal"[108] but this is an incorrect assessment of the *Amerindian Act* 2006. Unlike aboriginal or native title which requires the claimant to show occupation at the time of acquisition of sovereignty by the State (and therefore over hundreds of years), the land claims procedure in Guyana gives an Amerindian community the right to claim land if the community has occupied the land for at least 25 years.[109] Relevant factors for consideration include the community's "use" of the area, their customs and traditions, and their relationship with the land. Not every use of land is sufficient to grant title. The Minister of Amerindian Affairs must also take into account the extent to which the community has demonstrated a physical, traditional cultural association with or spiritual attachment to the land.[110] A community that is dissatisfied with the

106 *Ibid.*, Section 48.
107 *Ibid.*, Section 50.
108 Cotula, L. and Mayers, J. (2009). *Tenure in REDD: Start-point or afterthought?* Natural Resource Issues No. 15. London, UK: International Institute for Environment and Development (IIED).
109 For a fuller description of the land claims process *see* Janki, M. "Land claims settlements – an alternative Commonwealth model?" *Journal of the Commonwealth Lawyers' Association* 15(2).
110 *Amerindian Act*, *supra* note 104, Section 62.

Minister's decision has an automatic right to appeal to the High Court even if the Minister's decision is *prima facie* reasonable.[111]

Even on State forests and lands outside of their boundaries, Section 57 of the *Amerindian* Act 2006 preserves the traditional rights of Amerindians. Traditional rights are defined as "any subsistence right or privilege, in existence at the commencement of this Act, which is owned legally or by custom by an Amerindian Village or Amerindian Community and which is exercised sustainably in accordance with the spiritual relationship which the Amerindian Village or Community has with the land, but does not include a traditional mining privilege".[112] Because traditional rights must be sustainable in order to be capable of being exercised by subsequent generations, traditional rights should be compatible with REDD. Coupled with Article 142 of the Constitution, Section 57 preserves Amerindian communities' traditional rights on State lands to access natural resources for which they depend, even if they are not included in the REDD scheme.

If Amerindian communities have rights over State lands but are not included in the REDD scheme for that area they will not lose their traditional rights but would continue to have access to the natural resources they depend on.

While the *Amerindian Act* is clear with regard to traditional rights, the Forests Bill is more confusing, referring to Amerindian rights which are "sustainable non-commercial practices". Since traditional rights over State lands and State forests are already defined as subsistence rights (i.e., non-commercial) the rationale for the change in Forests Bill is unclear. However any attempt to use this provision to restrict Amerindian rights under the *Amerindian Act* would be vulnerable to a constitutional challenge. Any REDD scheme would have to accommodate fully the existing rights of Amerindian communities occupying or using State forests or undeclared forests on State lands.

3. Land and carbon ownership

The legal regime of land ownership in Guyana is a mixture of the English law of personalty and Roman-Dutch law. Under the *Interpretation and General Clauses Act* (CAP2:01), public lands means all lands that are vested in the State, including State forests. State forests are those areas of State lands which have been declared to be State forests under Section 3 of the *Forests Act*. Approximately 13.7 million hectares of Guyana has been declared State forest.[113] The State owns all minerals in Guyana and as mentioned above these fall under the authority of the GGMC. Most of the land in Guyana, including the bulk of Guyana's forests, is owned by the State. The only significant private holdings are those lands held under Amerindian title.

A "forest" is defined in the Forests Bill as "an ecosystem dominated by woody plants consisting of (i) closed forest formations, where trees of various stories and undergrowth cover a high proportion of the ground; or (ii) open forest with a continuous vegetation cover in which tree crown cover exceeds ten per cent". Forest includes mangrove forests and any wetlands or open lands within a forest ecosystem; forest produce in the ecosystem; and biological, soil and water resources of the system.

111 *Ibid.*, Section 64.
112 *Ibid.*, Section 2.
113 R-PIN, *supra* note 84, p. 3.

The definition does not extend to minerals found within the forest. This perpetuates the conflicts with mining, as discussed above. Neither this definition nor the rest of the Forests Bill draws any distinction between carbon and the tree as the physical entity in which the carbon is stored.

Both the existing *Forests Act* and the Forests Bill define "forest products", although neither definition includes carbon. The Forests Bill defines forest products more broadly to include a much wider variety of other forest products such as derivatives from timber and plants, but it does not mention carbon specifically.[114] However, the Forests Bill allows the GFC to declare any other thing to be forest produce through public notice. Therefore, it is theoretically possible that carbon could be declared to be forest produce as it is a material asset. In any case all forest produce belongs to the State.[115] If carbon was declared to be a forest product, the concession holder would have to pay a royalty which should take into account the market value of the carbon.

It is doubtful whether the scope of the GFC's power extends to declaring an intangible financial interest such as carbon credits to be forest produce. Even so, the State would own all carbon credits in relation to State forests. Amerindians occupying or using State lands would not own any carbon credits as their rights are limited to traditional rights as defined in the *Amerindian Act*.

The State could transfer to another person (a corporation, an NGO, etc.) the right to sell the carbon. Such an arrangement would depend on whether the government considers this to be the best commercial arrangement and the one that is likely to raise the most revenue.

Guyana does not currently have any legislation which regulates the ownership of ecosystem services.[116] Applying general legal principles, the owner of the forests would probably be the owner of the ecosystem services.

3.1 Amerindian forests

The situation is similar for Amerindian forest in that the ownership of carbon and carbon credits would follow the ownership of the land. Although the Forests Bill excludes Amerindian lands from the definition of private land, this is legally incorrect as the land is privately owned even though it is owned collectively. As owners of forests, Amerindian communities would probably also be the owners of the ecosystem services and be entitled to trade in carbon credits in their own right. In theory, the Village Council could transfer the right to sell carbon, provided that this was in the best interests of the community.

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114 The Forests Bill 2007 defines forest produce as: (a) timber, firewood, charcoal, heart of palm, bark, and extracts of bark; (b) latex, gums, resins, flowers, fruits, seeds, nuts, leaves, fibres, turpentine, spices, dye-stuffs, moulds, fungi, drugs, fodder and thatching material derived from trees or plants; (c) trees, plants (including bamboo and other grasses) and all parts and produce of trees and plants, regardless whether the trees or plants are dead or living; and (d) any other thing, after public consultation, that the Commission, by public notice, declares to be forest produce.

115 *Ibid.*, Clause 73.

116 It is worth noting that Guyana's territorial sea which functions as a carbon sink is owned by the State and Amerindian communities do not have any recognized rights over the sea other than their traditional collective rights to fishing and passage.

3.2 Protected areas

Guyana has two protected areas which are viewed as potential new carbon reserves.[117] The Kaieteur National Park was established by the *Kaieteur National Park Act* (CAP 20.02) in 1930 as a strict protected area. Mining, forestry, and other resource use are prohibited within the park. The legislation was amended in 1999 to protect traditional Amerindian rights and privileges (hunting, fishing and gathering) in the park.[118] The State owns the land and all resources, including the carbon, in the Kaieteur National Park. The GFC has no legal mandate to make any arrangements for the forests in the park. Furthermore, under the Forests Bill the park is specifically exempted from becoming a State forest.[119]

The park falls under the jurisdiction of the National Parks Commission, which has the function to maintain and regulate the use of the park so as to leave it unimpaired for future generations.[120] The Commission's powers are limited to infrastructure and maintenance of the park. The Commission is also entitled to charge fees for entry, travel through, and use of the park or its facilities.[121] Under this limited mandate, it is doubtful whether the Commission's powers could be read as extending to participating in a REDD scheme. Therefore, it is unclear who would have the legal authority to deal with the carbon in the forests located in the park.

The *Iwokrama International Centre for Rain Forest Conservation and Development Act* 1996 established the Iwokrama reserve, which covers 360,000 hectares of tropical rainforest. The legislation requires that approximately 50 per cent of the area must be allocated for sustainable utilization, while the rest must be set aside as a wilderness reserve. Similar to the Kaieteur National Park, the GFC has no mandate over Iwokrama, and the Forests Bill specifically exempts Iwokrama from becoming a State forest.[122] No mining, forestry, or other resource use may be carried out without the consent of the Centre, which is governed by an international board of trustees. Because mining is incompatible with sustainable use and maintaining the wilderness area in an undisturbed state, a REDD scheme in Iwokrama would not be subject to conflict with GGMC.

Iwokrama has entered into an agreement with Canopy Capital to measure ecosystem services such as rainfall production, water storage, and weather moderation. However, the deal does not include carbon.[123]

In addition, the Government has prepared draft legislation to create a national PA system. This legislation is expected to include protection of ecosystem services, including carbon storage or sequestration. To provide clarity, such legislation should also clarify who has the authority to deal with carbon stored in protected areas.

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117 R-PLAN, *supra* note 87, p. 2.

118 The government changed the legislation in response to a constitutional motion filed by the author on behalf of an Amerindian community.

119 Forests Bill, *supra* note 31, Clause 3.

120 *National Parks Commission Act* 1977, Section 5.

121 *Ibid*., Section 13.

122 Forests Bill, *supra* note 114, Clause 3.

123 Iwokrama.org, "Pioneering investment deal prices ‚utility value' of rainforest". (March 27, 2008). Press Release.

4. REDD obligations

In relation to State forests and the Kaieteur National Park, the State would be the seller of the carbon credits. In relation to Iwokrama, the Board of Trustees should have the power to deal with carbon because they already possess a mandate to demonstrate that tropical forests can maintain biological diversity while supporting economic activity. Furthermore, they have already entered into an agreement for ecosystem services with Canopy Capital.

The LCDS does not contain provision for involving community organizations or NGOs in the carbon markets. These organizations do not own any forests and cannot represent the State or private owners of forests. Local NGOs could be involved in providing on-the-ground monitoring services.[124] Although the traditional rights of Amerindian communities are protected in both the Kaieteur National Park and Iwokrama, this does not extend to the right to participate in a REDD scheme in either protected area. However, under the Iwokrama legislation, the Centre must ensure adequate consultation with and the involvement of the Amerindian community in the Centre's activities. Although somewhat vague, this provision could be the basis for some form of Amerindian involvement in REDD in Iwokrama.

As stated above, Amerindian communities who own land would, under normal operation of the law, own the carbon credits for the forests on their lands. As currently envisaged in the LCDS there would be no barriers to Amerindian communities taking part in REDD. However, Amerindian communities depend on their land for their physical and cultural survival, not merely as individuals but also as peoples. Therefore, the *Amerindian* Act 2006 prohibits the Village Council and community from disposing of their lands since any disposal would undermine that survival.[125] As such, REDD could not involve any transfer of title or any property right. According to the IIED, Amerindian titles may be revoked in the public interest if Amerindians transfer rights to their titled lands or parts thereof.[126] This is incorrect – under the *Amerindian Act* 2006 the attempted disposition is void and the title is unaffected.

Although Amerindian communities are entitled to lease their lands, a lease would not be feasible since it is limited to ten per cent of the community's territory which would not be sufficient for REDD. Even if ten percent was considered sufficient as a pilot project, the lease has to be for productive use.[127] It is doubtful whether avoided deforestation would be considered to be productive use since productive use is generally regarded as using the land to produce something or harvesting material resources from the land, rather than conservation.

To be effective a REDD scheme would need to be developed in such a way that it did not amount legally to a disposal of any interest, right or title in the Amerindian lands. Amerindians are entitled to sell resources on their lands provided it does not affect their ownership of the land. A REDD scheme

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124 For example, the South Rupununi Conservation Society has been appointed by the Environmental Protection Agency as the lead organization to monitor the Red siskin, a very rare species of bird. Such work could easily be extended to monitoring the bird's forest habitat for REDD.

125 Amerindians who wish to have an individual rather than a collective title are free to apply for individual titles on the same basis as other Guyanese. Amerindian title protects the special situation and collective rights of the communities.

126 Cotula and Mayers, *supra* note 108.

127 *Amerindian Act*, *supra* note 110, Section 46.

could be implemented by having a commercial agreement between the Amerindian Village Council on the one hand, as the legal representative of the community trading the carbon credit, and on the other hand, the buyer who would be selected through normal commercial channels.

5. Framework for benefit sharing

As REDD does not yet exist there is no benefit-sharing regime in place. Benefit sharing is to be addressed under the R-PLAN. Under the LCDS the revenue will accrue to the Government. The Government intends to create the Guyana Low-Carbon Finance Authority to collect, manage, and monitor forest payments.[128] A Low Carbon Strategy Project Management Office will also be established to drive key projects in cooperation with the Guyana Office for Investment, which is responsible for attracting investments to Guyana. The Government also proposes that in the long term the Guyana Low Carbon Finance Authority should interface with a new tropical forest funding agency to ensure appropriate fiduciary oversight of funds. The intention is to have full transparency on disbursements and use of funds within Guyana, with strict controls and external audits.

During the first phase in 2009, Guyana expects to raise funds to launch the LCDS and pay for a monitoring, reporting, and verification (MRV) system. Under Phase 2 (2010–2012), the Government hopes to obtain transitional funding starting at US$60million and increasing to US$230–350 million. This revenue is to be treated as part of the Government budget, and spent on projects such as infrastructure, hydro-power, agriculture and aquaculture. Norway is the only country listed as a funder, and the LCDS notes that this phase will require the participation of other global partners. On 25 September 2009, Guyana and the Inter-American Development Bank signed two agreements for funding of US$1.45 million to support the LCDS. The funding will be used to strengthen national institutional capacities for dealing with climate change as well as improving disaster risk and flood management.[129]

Under Phase 3 (2013–2020), the Government is depending on the expansion of the carbon compliance markets and the increased supply of REDD credits to generate payments of up to US$580 million. The LCDS notes that: “These payments will supplement, and hopefully ultimately replace, transitional payments”.[130] In this phase there are no provisions for benefit sharing but only for all revenues to be spent by the Government on infrastructure and economic development projects.

Phase 4 is intended to start in 2020 with a full-scale REDD mechanism funding all the costs of avoided deforestation. The Government will remain in control of all funds and the LCDS notes that there will need to be a balance between using the forest payments to enhance opportunities for those who live in forests and recognizing the rights of other Guyanese citizens including the urban poor.[131] Benefit sharing is therefore seen as nothing more than general benefits from projects which will be selected and developed by the Government. This is an unsatisfactory approach as the forests do not belong to the government but to the State which comprises the citizens of the country. In 2000 Guyana completed a highly participatory and successful national exercise, with broad-based political and

128 Office of the President, Republic of Guyana, p. 31.
129 Stabroek news. (2009b). “Gov’t/IDB seal US$1.45M contracts for local climate change fight”. 26 September.
130 Office of the President, Republic of Guyana, *supra* note 92, p. 19.
131 *Ibid*., p. 26.

civil involvement, to produce a National Development Strategy. In view of the significance of REDD, it would be appropriate to have a similar national process to reach a national consensus on how the revenue from REDD should be shared by the citizens of the country. There should also be national rather than international mechanisms by which Government is held accountable for expenditure.

Under the LCDS, the Government proposes that Amerindian communities who take part in REDD will receive their share of forest compensation payments. Some funds will be paid directly to the Amerindian communities, while the rest will be paid into an Amerindian Development Fund to be used for development programmes in Amerindian communities. This is intended to be similar to the Brazilian Amazon Fund. There would seem to be no good reason for Amerindian communities to agree that payments in respect of their forests should be paid to the Government. The situation in Brazil is very different as Amerindians in Brazil are not allowed to own land – the land is owned by the federal state and set aside as Indian reserves. As the landowners, Guyanese Amerindians should be entitled to have the payments for their forests made directly to them. It would be up to the Amerindian communities to retain professional experts to assist them in designing and implementing an acceptable REDD scheme.

6. Information, participation and partnerships

Guyana does not yet have legislation that requires the government to share information with its citizens. All proceedings of the National Assembly are public, but in practice it is difficult to obtain copies of parliamentary debates or other official documents.

In relation to REDD, however, the *Environmental Protection Act* 1996 is one useful avenue for obtaining information and ensuring greater public participation. Section 17(2) provides that "Where any public authority adopts or alters any policy, programme or plan and such policy, programme, plan or alteration may significantly affect the environment the [Environmental Protection] Agency shall require the public authority to carry out an environmental impact assessment of such policy, programme, plan or alteration". Section 11 automatically requires an EIA for any project listed in the fourth schedule to the act, which includes: installations for hydro-electric power, roads, and construction of dams and other installations to hold or store liquid on a long-term basis. If the Environmental Protection Agency (EPA) decides for any reason that an EIA is not necessary, the EPA must publish its decision and any person who may be affected by the project is entitled to appeal against the decision to the Environmental Assessment Board.

Section 11 of the *Environmental Protection Act* also provides for reasonable public access to information and public participation in the EIA. The developer is required to submit to the EPA a project summary with the site, design and size of the project, possible effects on the environment, duration of the project and a non-technical explanation of the project. The EPA in turn must publish a notice of the project in at least one daily newspaper and must make the project summary available to members of the public. This ensures that the public will be aware of any proposed project to be carried out with REDD funding. Members of the public have 28 days to write to the EPA setting out the matters which they want to be considered in the EIA. The EPA must take these submissions into account when scoping the terms of the EIA.

During the EIA, the developer must consult members of the public, interested bodies and organizations, and must provide copies of information at a reasonable cost. The Environmental Protection Act also specifies in detail the information that must be covered in the EIA including: the geographical area, land-use requirements, the impact on human beings, flora, fauna, habitats, soil, water, air, climatic factors, cultural heritage, landscape, ecological balance and ecosystems, pollution, and the duration of the project. The developer must publish a notice in a national newspaper informing the public when the EIA and the environmental impact statement were submitted to the EPA, and the EPA must make these documents publicly available at a reasonable cost.

The public therefore has access to all relevant information. There is a 60-day period during which the public can make further submissions to the EPA, and the EPA must take these submissions into account when deciding whether to approve the project. The EPA must then publish its decision and the grounds for its decision. Under Section 28, any person who is not satisfied with the EPA's decision can appeal to the Environmental Appeals Tribunal and from there to the High Court. The EIA process therefore offers members of the public some opportunity to review the LCDS and changes in policy as well as to influence the scope of projects to be funded under REDD.

Many projects proposed by a REDD scheme will likely be subject to an EIA. First, the LCDS, once finally adopted, will certainly have a significant impact on the environment and could be subject to public scrutiny and comment. Moreover, the government proposes to use revenue from avoided deforestation to fund hydropower, drainage and irrigation, roads, aquaculture, and agricultural expansion in non-forested areas. Under Section 11, these projects may be subject to an EIA, because they are all listed in the fourth schedule, even if the development is being carried out by the State or one of its agencies. Agriculture and aquaculture projects would also be caught by this provision since they are likely to be large-scale if initiated by the government using REDD funding. Lastly, any change to the GLSC's land-use plans for Guyana as a result of REDD could be subject to an EIA if the change may significantly affect the environment.[132]

There has been consultation on the R-PIN and R-PLAN with a variety of stakeholders, including Amerindian communities and the forestry sector. Furthermore, there are currently national consultations on the LCDS. The draft LCDS is publicly available, and everyone has the right to provide feedback. In addition, meetings have been held with the National Toshaos Council and Amerindian Communities. There is a national steering committee for consultations, which consists of the Minister of Amerindian Affairs, the Minister of Agriculture and representatives of Conservation International (Guyana), trade unions, women's affairs organizations, Amerindian NGOs, the GFC, and the GGMC. The external review for the R-PIN recommends that the National Toshaos Council and the Amerindian Peoples Association should be approached to ensure proper consultation with Amerindian communities. The National Toshaos Council, comprising all elected Amerindian leaders is in a good position to advise the government on how best to consult Amerindian communities. The recommendation to involve an NGO is however an unfortunate step backwards and undermines the authority of the Amerindian communities. The Amerindian communities have made it very clear that consultation must take place directly with them as historically there have been conflicts between the community position and the NGO stance. It is very difficult to consult each Amerindian community

132 *Lands and Surveys Commission Act*, *supra* note 100, Section 4.

but this is exactly what will need to happen if free prior informed consent for REDD is to have any real meaning. While the government should consult all Amerindian NGOs they should have no say over any activities in Amerindian communities and should not be regarded as representing anyone other than their relatively small memberships.

Participation in any REDD scheme itself will vary from full participation from private landowners to limited participation such as consultation. With regard to State forests, the State will decide whether to participate in REDD.

In forests on Amerindian lands, decisions would lie with the Amerindian community. In such a process, the key stakeholders would be the Amerindian communities as the landowners, and the Amerindian Village Councils as their elected representatives. NGOs, including the Amerindian NGOs, have no say in what happens with the forests on Amerindian lands. Under Section 13 of the *Amerindian Act* 2006, the Village Council has the legal function of representing the community and is prohibited from delegating that function to any other person. The Village Council also has a legal responsibility to act in the best interests of the community, and therefore would have to ensure that a proposed REDD scheme is the best land-use decision.

The LCDS proposes that Amerindian communities should have the opportunity to opt in if they wish to do so at any time. If an Amerindian community were to decline to take part in REDD, the State would most likely have to accept that decision. By virtue of Article 142 of the Constitution, which protects private property, it would be difficult if not impossible for the State to acquire Amerindian land for the purpose of REDD.

Article 142(b) provides that the protection against the deprivation of property does not apply where the deprivation is authorized by a law that provides for the possession or acquisition of the property of the Amerindians of Guyana for the purpose of its care, protection, or management. Arguably, this provision could be used to take away Amerindian lands for the purposes of a REDD scheme. However, this would violate Article 149 which prohibits discrimination, and such a taking would probably be struck down by the courts.[133] The State would therefore not be able to pass new legislation on REDD which deprives Amerindian communities of their rights over their land in order to accommodate a REDD scheme.

With regard to Amerindian communities that do not own the land they occupy and use, the State as the landowner does not need their consent before putting the forests into REDD. However, the State would still be prohibited from interfering with traditional rights under Article 142 of the Constitution.

The Forests Bill[134] also provides for community forestry management of State forests through an agreement with a community group for the community group to occupy and manage a specified area of State forest. The community group must be registered as an NGO. Theoretically, this provision could be used to involve local communities in the implementation of REDD.

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133 It should be noted that the special regime for Amerindian rights is expressly allowed by Article 149(6)(c) of the Constitution, which allows the State to make special arrangements for the protection, well-being, or advancement of Amerindians.

134 Forests Bill, *supra* note 114, Clause 11.

The main international partnership is currently with the Government of Norway which is paying for an international institution to provide independent advice on the consultative process. Conservation International and WWF have been involved with the GFC on the R-PIN. Conservation International (Guyana) has also recently conducted the study on "Biodiversity Mainstreaming through Avoided Deforestation" under a project by the Inter-American Development Bank.

7. Additionality

An underlying concept for REDD is that a project must show that it results in emissions reductions that are "additional", and not merely part of "business as usual" (BAU). Reductions are calculated using baseline data which show historical rates of deforestation. Funding under the basic REDD scheme should therefore flow to countries who have engaged in deforestation (and are contributing to corresponding damage to the global climate system) in order to give them an incentive to curtail deforestation activities.

However, Guyana has experienced low rates of deforestation (0.1–0.3 percent). This has created difficulties in demonstrating additionality. Furthermore, it has raised the question of whether Guyana should be eligible for REDD funding if it is already conserving its forests and therefore not causing carbon emissions from deforestation?

This point has been addressed by the Government of Guyana in its Avoided Deforestation report.[135] In this report the government argues that "baseline assumptions should be driven by analyses that assume rational behaviour by countries seeking to maximize economic opportunities for their citizens (an 'economically rational' rate of deforestation)". Rather than using an historical baseline, the argument goes, REDD methodology should include a "forward looking baseline rate of economically rational deforestation", as this better reflects the pressures on forests in highly forested countries.[136]

The revenue from deforestation, or as it is described in the Avoided Deforestation Report, the economic value to the nation (EVN) is calculated by taking into account the value of timber harvesting plus profitable post-harvest activities such as agriculture and mining. The EVN is highly significant for Guyana. As the Avoided Deforestation Report points out, "The great majority of Guyana's forests are suitable for timber extraction, there are large sub-surface mineral deposits within the forest, and rising agricultural commodity prices increase the potential returns to alternative forms of land use, all increasing the opportunity cost of leaving the forest alone".[137] The Office of the President estimates the annual EVN to be between US$430 million and US$2.3 billion depending on commodity prices, and how aggressively Guyana pursues an economically rational (albeit environmentally destructive) path. Most of that value would derive from post-harvest land use.

Guyana argues that unless REDD can deliver an equivalent revenue to that of the EVN, Guyana will have no option but to start deforestation. REDD would therefore have to include payments for avoided deforestation. In line with this the R-PLAN states that Guyana regards reducing emissions

135 Office of the President, Republic of Guyana. (2008). "Saving the World's Forests Today: Creating incentives to avoid deforestation".

136 *Ibid*., p. 2.

137 *Ibid*., p. 10.

from avoided deforestation as a part of conservation consistent with the Bali Action Plan.[138] The LCDS also takes the basic position that REDD must include avoided deforestation. The LCDS notes that there is a problem with leakage, and suggests that any REDD scheme should require permanent commitments to avoid rainforest nations from reversing their policies on protection.

The additionality requirement is problematic. Countries already engaging in forest conservation before REDD commences may be ineligible for funding because emissions reductions are already part of the BAU scenario. Furthermore, the additionality requirement can have the unintended consequence of reducing the protection of the forests in the short term. In Guyana, the requirement for additionality is almost certainly linked to the Government's delay in moving ahead with the creation of a national PA system. Under a REDD agreement, a national PA system would be a good mechanism for monitoring and verifying compliance with Guyana's obligations to conserve its forests.

8. Conclusions

Guyana is taking a lead in the debate on forest conservation and has demonstrated its willingness to conserve its forests, provided that the international community is willing to compensate Guyana to forego revenues from deforestation and post-harvest activities. While this is the correct approach, Guyana faces serious challenges. The Stern Review considers that "Climate change is the greatest market failure the world has ever seen and it interacts with other market imperfections".[139] As long as the price of harvested timber does not reflect a loss of ecosystem services, deforestation is likely to continue. One of REDD's flaws is that it does not address this underlying market failure.

Guyana's approach to REDD is heavily dependent on the development of carbon markets, but there are risks to this approach. There is still no agreed price for carbon, and the range of current estimates is immense. A bottom estimate is US$10 per ton,[140] but according to the UK Government the damage cost of carbon emission is between US$56 and U$S223 per ton.[141] The international legal principle of polluter pays implies that the person responsible for the emission of greenhouse gases should pay the costs of pollution. This should be addressed in the carbon markets, but there is no guarantee that it will be. One challenge for Guyana is to enter the carbon market at the right time and to ensure that it, not intermediate traders, will benefit from any increase in the price of carbon. A further concern is whether Guyana will be able to secure predictable long-term financing given the volatility of the market.

Guyana's requirements are simple – to be paid for maintaining its forests as part of the fight against global climate change. REDD seems to be an unnecessarily complicated route to achieve this. An alternative is simply to pay Guyana for keeping its forests intact. The investor's only concern would be to verify that the forests are indeed being conserved, and this could be achieved through a properly funded and well functioning PA system.

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138 R-PLAN, *supra* note 87, p. 2.

139 Stern, N. (2006). *The Economics of Climate Change: The Stern Review*, p xviii. Cambridge, UK: Cambridge University Press.

140 Da Fonseca, G.A.B. *et al.* (2007). "No Forest Left Behind". *PLoS Biology* 5(8) e216: 1645–1646.

141 Action Aid International, "Real Aid: An Agenda for making Aid Work". (June 2005) Johannesburg, South Africa.

Guyana's approach depends on the international community of States being able and willing to recognize the standing value of forests and to pay the cost of conserving those forests. However unless there is a major change of policy at the international level and a binding legal treaty, Guyana will be dependent on the goodwill of rich States. It therefore remains very uncertain whether the LCDS can actually deliver the revenue that Guyana requires.

Case Study: Papua New Guinea

Marguerite Pettit*

1. Origin and background of REDD in Papua New Guinea

Papua New Guinea (PNG) has been one of the more vocal countries in favour of including REDD in a post-Kyoto agreement. With help from the UN-REDD Programme and the International Forest Carbon Initiative, it is preparing for REDD domestically. REDD pilot projects have also received funding from Norway, Australia, and the EU.

The Office of Climate Change and Environmental Sustainability (OCCES), the entity in charge of administering REDD in PNG, has been involved in two pilot REDD projects – the April Salome, and the Kamula Doso. The April Salome project, located in East Sepik Province, comprises 521,000 hectares of virgin forest, and is home to 20,000 indigenous peoples.[142] The land is owned by approximately 160 families. The Kamula Doso project is located in Western province, and covers 800,000 hectares of virgin rainforest. Both projects have come under scrutiny for allegations that the OCCES issued REDD carbon credits without legal authority to do so. In particular, the Kamula Doso project has been scrutinized because credits were issued on land that is the subject of an ongoing dispute between loggers and the Forest Authority, and is under an injunction.[143]

The government has not given a clear indication as to how REDD projects will be administered within its jurisdiction, or who will own the carbon rights. Furthermore, the government's consultation with indigenous and local communities has been inconsistent with its Framework REDD Policy. This has led some to question PNG's ability to administer REDD equitably and provide for meaningful participation of customary owners. In addition to addressing possible corruption at the OCCES, PNG has the task of addressing legal issues with enforcing logging statutes, and uncertainties in its customary land tenure laws.

2. Existing legal and policy framework

2.1 PNG's policy framework on REDD

To serve as a guide on REDD, the OCCES developed a *National Climate Change Policy Framework for Papua New Guinea* (Policy Framework). The Policy Framework emphasizes carbon trading as a

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142 *See, e.g.* South Pole Carbon Asset Management Ltd. (2009) "Hopes on REDD as a powerful tool to halt global warming" p. 2 (describing the April Salome project work as of June 2009).

143 The Economist (2009b). "Papua New Guinea and carbon trading: Papua New Guinea and some irregular carbon credits". 6 June.

means of generating income, and promotes forest mitigation strategies to reduce GHG emissions.[144] It also outlines the key strategies for achieving REDD objectives.

However, the Policy Framework fails to provide any details regarding benefit sharing, or how "stakeholder participation and equitable distribution of benefits"[145] will be achieved. The policy also makes reference to carbon assessment, monitoring, and accounting. However, it does not provide any details regarding issues such as leakage, permanence, or additionality. Similarly the Policy Framework fails to establish whether REDD will take a project or national-level approach, excluding discussion of significant issues such as how baselines will be measured if the national approach is taken. Most notably, the Policy Framework does not refer to any of PNG's legislation, or how it will interact with existing forestry and the environmental laws.

2.2 PNG existing legal framework for forests and the environment

The basis of all of PNG's laws must lie in the *Constitution of the Independent State of Papua New Guinea*.[146] Section 4 of the *Constitution* declares that one of its goals is to conserve natural resources and the environment for the collective benefit of all so that future generations can benefit. It calls for wise use of *inter alia* resources on the land, and for "all necessary steps to be taken to give adequate protection to … plants and trees". Furthermore, the *Constitution* calls on all persons in the country to safeguard its natural wealth, resources and environment for present and future generations. It also requires participation and consultation with relation to government matters.

The *Constitution* also provides protection from unjust deprivation of property. Under Section 53, "possession may not be compulsorily taken of any property, and no interest in or right over property may be compulsory acquired". However, there are several exceptions. One of these exceptions applies if the property is required for a reason that is reasonably justified regarding the "rights and dignity of mankind". Furthermore, Section 53 does not prevent restriction on the use of land or property right if the restriction is reasonably necessary for the preservation of the environment.

Of particular significance to REDD is Schedule 2.1 of the *Constitution*, which recognizes custom as forming part of the underlying law of the country. This guarantees customary land ownership, and supports rights of customary control over forest resources.[147]

To date, the government of PNG has not passed any legislation on REDD. However, the government has indicated that draft REDD legislation will be made available by October 2009[148] in line with its commitments under the UN REDD National Joint Programme (NJP) "Quick Start" funding.[149]

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144 Office of Climate Change and Environmental Sustainability, Government of Papua New Guinea (OCCES). (2009a). "National Climate Change Policy Framework for Papua New Guinea", p. 8. Port Moresby, Papua New Guinea: Government of Papua New Guinea.

145 *Ibid*., p. 13.

146 *Constitution* S 10 (a) states that "All written laws (other than this Constitution) shall be read and construed subject to – (a) in any case – this Constitution".

147 Vegter, A.A. (2005). *Comment: Forsaking the Forests for the Trees: Forestry Law in PNG Inhibits Indigenous Customary Ownership*. Pacific Rim Law & Policy Journal 14(2): 545–574, at 545 and 547.

148 Baker & McKenzie. (2009). "Background Analysis of REDD: Regulatory Frameworks", p. 67. Report prepared for the Terrestrial Carbon Group and UN-REDD Programme. Sydney, Australia: Baker & McKenzie.

149 OCCES. (2009b). "National Joint Programme (NJP) Submission Form to the UN REDD Programme Policy Board".

Nevertheless, there is an existing legal framework for forest and environment in PNG. The forestry sector is regulated under the *Forestry Act* 1991. It provides for the management, development, and protection of PNG's forest resources and environment. The Act is administered by the Forest Authority. The Forest Authority has power to prepare National Forest Plans (NFPs), negotiate Forest Management Agreements (FMAs) and timber permits, and enforce regulations over forest produce. The Forest Authority also acts as an agent for the State with relation to any international agreements relating to forestry matters.[150] As such, the Forest Authority would probably be the central State agency in charge of overseeing REDD in PNG.

The *Forestry Act* provides for the participation of customary owners in forestry operations. The Act requires the Forest Authority to negotiate FMAs with customary owners before it can acquire forest management rights.[151] Nevertheless, this participation is quite limited in practice, as will be explained in subsequent sections.

The Department of Environment and Conservation (DEC) is the government agency responsible for biodiversity conservation. Along with the Forest Authority the DEC is responsible for creating forest reserves under the *Forest Act*, and Wildlife Management Areas, National Parks, reserves and sanctuaries under the *National Parks Act*, the *Fauna (Protection and Control) Act* and the *Conservation Areas Act*.

3. Land and carbon ownership

3.1 Ownership of land and forest resources

Land ownership law in PNG is regulated under two types of tenure systems: "customary" and "alienated". Customary land ownership is supported by the *Constitution*. Under Section 2 of the *Forestry Act*, "customary land" is land owned or possessed by an individual citizen or community that, by virtue of proprietary or possessory rights belong to that citizen or community, and "arise from and are regulated by custom". Customary ownership discourages the sale of land because it is thought to be sacred, due to the fact that owners' ancestors have been buried on the land from time immemorial.[152]

Under customary land tenure, clans have outright ownership, while individual members have rights to use and occupy land. The land is held, securely and in the long term, by the group for the benefit of the group. Custom varies from place to place, and its application to land tenure in any particular place is subject to determination by a land court operating under the *Land Disputes Settlement Act*. Approximately 97 percent of land in PNG is customarily owned.[153]

The remaining three percent of land in PNG is held in alienated title, usually under leasehold. Under Section 4(1) of the *Land Act* 1996, "All land in the country other than customary land is the property of the state, subject to any estates, rights, titles or interests in force under any law".

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150 *Forestry Act* 1991, S 7.
151 *Ibid*., Division 4.
152 Vegter, *supra* note 147, p. 186.
153 Australian Agency for International Development (AusAID). (2008a). *Making Land Work. Volume one: Reconciling customary land and development in the Pacific*, p. 4. Canberra, Australia: AusAID.

The Policy Framework refers to carbon ownership, stating that it will remain with the owner of the land, whereas "the development and sale of carbon stock will be the responsibility of the State".[154] However, the government has not revealed any further specific information relating to carbon ownership, or how it will be regulated. It is quite possible that carbon will be considered a forest product, leaving its ownership to be regulated under a similar approach to that of timber products.

Timber products are currently regulated by the *Forestry Act*. Before an entity may engage in harvesting timber, it must obtain a timber permit through negotiations with the Forest Authority. However, before the Forest Authority can lease harvesting rights, it must enter into a FMA with the customary landowners concerned.[155]

In order to be eligible to enter into an FMA, the customary owner must have either registered title to the land, or registered with other owners as a land group under the *Land Incorporation Act* 1974.[156] If it is impractical for title to be vested in a land group or registered under a customary law, an FMA may be executed on behalf of the customary group by an authorized agent, assuming at least 75 percent of the customary owners concerned give their written consent.[157] Under Section 56, acquisition of timber rights by the Forest Authority does not affect customary rights of ownership of the land.

After obtaining an FMA, the Forest Authority may solicit project proposals. If a project proposal is deemed sufficient, the forest industry participant will be invited to apply for a timber permit. An application for a timber permit must be accompanied by an environmental plan that complies with requirements established by the *Environmental Planning Act* of 1978.[158] Logging can only occur in PNG in Forest Management Areas and if the loggers are in possession of a timber permit which specifies the allowable cut.[159]

Timber permits are renewable, subject to application and permission by the National Forest Board. Approval is subject to consideration of factors such as the social acceptability of the project, prior performance of the permit holder, and the amount of resource available, which is determined in accordance with sustained yield management practices.[160] Permits are also transferable.

These provisions give the government an intermediary role in the allocation of timber rights. However, it also restricts decision making by customary owners over what happens to the forest resources on their land. First, FMAs limit the voice of customary owners over what happens to their land. When a developer submits a project proposal, the proposal must meet Project Guidelines, which are formed through consultation with customary landowners. However, requirements for consultation stop there. Evaluation of the proposal itself does not mandate consultation, nor does the negotiation of the timber permit.

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154 *Ibid*., p. 22.
155 *Forestry Act*, *supra* note 150, S 55(e).
156 *Ibid*., S 57(1).
157 *Ibid*., S 57(2).
158 *Ibid*., S 77.
159 *Ibid*., S73 (2).
160 *Ibid*., S 78.

If REDD legislation for issuing carbon concessions does end up looking similar to that for timber, it should deal with these negotiating deficiencies when it comes to carbon. As custodians of the forest, customary landowners should be consulted throughout the process, not just at the beginning when project proposals lack specific detail. Furthermore, they should have more say when it comes to negotiating royalties. Ultimately, REDD legislation should give strength to constitutional provisions which provide for customary land rights, rather than just provide another avenue for the government to make money by leasing its forests.

3.2 Dispute resolution

The current mechanism for settling disputes over customary land ownership is the *Land Disputes Settlement Act* 1975. Dispute resolution facilitated by this Act is based on Melanesian culture and the "principle that a resolution by consensus is more permanent than one imposed by authority".[161] The Land Titles Commission, National Land Commission and Land Courts all facilitate dispute resolution.

Typically, a land dispute is first taken to a local mediator, normally a male (according to custom), who is greatly respected and who has the requisite customary knowledge of the rules and principles that apply to the dispute. If this fails, the disputing parties go to the Local Land Court, which can impose a settlement. The parties may then appeal the Local Land Court's decision to the Provincial Land Court; however, grounds for appeal are limited to "errors of jurisdiction, decisions made contrary to natural justice (procedural fairness),[162] and cases of manifest injustice".[163]

Section 4 allows the Head of State to settle the dispute if it has been determined irreconcilable, if it has resulted in a breach of the peace, if there is no possibility of the disputing parties reaching an agreement, or if it is in the national interest that the agreement be settled in some other manner.[164]

The current system for dispute resolution over existing title to land and associated remuneration suffers from a number of weaknesses. First, insufficient resources for staff and organizations facilitating dispute resolution prevent speedy resolution. This is compounded by local magisterial services giving preferences to criminal and civil cases over land disputes.[165] Furthermore, confusion between which institution should handle a particular dispute, and slow turnover rates, cause community groups to seek mediation from more than one institution. Costs associated with seeking formal resolution also prohibit poorer groups and women from seeking and resolving disputes.[166] Lastly, the large number of varying customs creates confusion in the courts, and results in some cases being thrown out because they are not recognized.

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161 *Ibid*., p. 235.

162 New South Wales Department of Education and Training. (2008). "Procedural Fairness". ("Procedural fairness refers to a process that provides fairness to all parties. It includes the right to be heard, the right to be treated without bias, the right to be informed of allegations being made and to be provided with an opportunity to respond to them and the right to information regarding the status of the complaint.")

163 Australian Agency for International Development (AusAID). (2008b). *Making Land Work. Volume two: Case studies on customary land and development in the Pacific*, p. 229. Canberra, Australia: AusAID.

164 *Ibid*., p. 231. Section 4 allows the Head of State to settle the dispute if it has previously been irreconcilable, if it has resulted in a breach of the peace, if there is no possibility of the disputing parties reaching an agreement or it is in the national interest that the agreement be settle in some other manner.

165 *Ibid*.

166 Australian Agency for International Development (2008a), *supra* note 153, p. 59.

Such delays and limited avenues for remediation have resulted in increased fighting, tensions, and at times violence between disputing parties. Furthermore, the number of cases heard under Section 4 for abuses by the national government is all too frequent.

An essential component of REDD legislation will be a strengthened mechanism for dispute resolution. REDD projects will result in an increase in financial remuneration available to customary owners, and therefore disputes over land title, and enforcement of benefit-sharing agreements are likely to increase. Furthermore, the proper regulation of carbon ownership will be dependent on secure title to land and, in the event of disputes, effective means for their resolution. Therefore, REDD legislation should focus on addressing these deficiencies.

4. REDD obligations

Under the *Environmental Planning Act* of 1978, the Minister for Forests can require submission of an environmental plan for approval for proposed projects likely to have significant environmental and social impacts in forested areas.[167] In developing the plan, the developer must conduct detailed studies on the biological, social, and cultural implication of the project. If adverse impacts are implicated, the developer must indicate how those impacts can be mitigated. Section 10 provides for an exemption application to be made if, in the developer's view, the project is unlikely to have any significant environmental affects. Under Section 8, until an environmental plan is approved, authorities are prohibited from issuing a permit, licence or lease, or providing a loan, grant, or guarantee for a proposed project.

Under Section 77, an application for a timber permit must be accompanied by an environmental plan. If carbon is regulated similarly to timber produce, as has been suggested, it should also be subject to such requirements.

Under customary law, landowners would probably not be allowed to sell title to their land for a REDD project. It is also debatable whether customary landowners, under current law, would be able to lease rights to stored carbon. If REDD legislation is framed in the same way as concessions for timber extraction, the Forest Authority would probably negotiate with customary landowners under an FMA framework. Subsequently, the Authority would be in charge of leasing the land for REDD proposals. Under the Constitution, customary owners would still retain customary rights.

Again, this creates the need for clarity over what customary rights landowners hold. Otherwise, rights and REDD objectives could come into conflict with each other. Customary rights should be more clearly defined under the law so that REDD project developers and government agencies can implement permit agreements while respecting the rights of customary landowners. Furthermore, administrative capacity should be strengthened in order to avoid disputes over conflicting uses, like the current dispute in Kamula Doso.

167 *Environmental Planning Act* 1978, S 4(1). Under Section 2, "project" means any development, scheme, construction, undertaking or activity which would involve a change of use or condition.

5. Framework for benefit sharing

PNG does not have a legal framework for benefit sharing under REDD. However, somewhat analogous benefit-sharing provisions exist under the *Forestry Act* 1991 (hereafter called 'Forest Act '). Under Section 58, the FMA negotiated between customary landowners and the Forest Authority must specify monetary and other benefits they will receive as consideration for giving away rights. The Provincial Forest Management Committee oversees the distribution of benefits to communities from logging on customary land.[168] Neither the *Forestry Act* nor its subsequent Regulations specify benefits to be received. However, both the *Forestry Act* and *Forestry Regulations* 1998 require project proposals to be developed by project proponents to include "analysis of projected cash flows and the anticipated net benefit to the resource owners and to the State", which is assessed by the Provincial Forest Management Committee.[169]

Due to the fact that no benefit-sharing arrangements have been mandated in PNG, a range of informal options have been circulating. So far, benefits from carbon sequestration agreements have been split by distributing 80 percent to customary landowners, 10 percent to investment companies, and 10 percent for monitoring and verification costs.[170] However, the entities facilitating projects appear to be offering significantly less, which is being met by protest from landowners who do not want to see their share reduced. In a memo from the OCCES regarding the participation of Earth Sky and Climate Assist PNG in REDD projects, the then Executive Director suggested a benefit-sharing framework allocating 20 percent to customary land owners with an equal proportion going to the OCCES.[171] A Memorandum of Agreement between Pacific Carbon Trade Limited and customary landowners allocates a total of 48 percent to customary owners and 30 percent to the national government.[172]

As no framework for benefit sharing exists, there is no way to ensure benefits are received by customary owners or land groups and this issue should be addressed as well. As one component of such a framework, dispute resolution should be strengthened and simplified, to allow customary landowners to more easily bring claims when benefits are withheld.

6. Information, participation and partnerships

Section 51 of the *Constitution* protects every citizen's right to access information. This extends to environmental matters through the *Environmental Planning Act* 1978. The Act does not mandate notification.[173] Nevertheless, assuming the Minister requires an environmental plan under Section 13, once an environmental review is complete it must be published for public scrutiny and debate. Notice must be published in the National Gazette; in a nationally circulated newspaper; in a newspaper circulated in the province affected; and by a radio broadcasting service. The notice must include the

168 *Forestry Act*, *supra* note 150, S 30 (g).
169 *Ibid*., S 67 (2) (e).
170 Baker & McKenzie, *supra* note 148, p.67.
171 OCCES (2009d). "Collaboration with Earth Sky and Climate Assist PNG" (12 June 2008) Letter from OCCES Executive Director Dr. Theo Yasause to Prime Minister of Papua New Guinea..
172 Pacific Carbon Trade Limited. (2009) "Memorandum of Agreement". 4 pages. Available online at http://www.redd-monitor.org/wordpress/wp-content/uploads/2009/07/pacific_carbon_trade_ltd.pdf.
173 *Environmental Planning Act*, *supra* note 167, S 1(b).

environmental plan, where inspection of the plan can occur, and the amount of time inspection will be available.

If a project proponent wishes to be exempted from an environmental review the application must be published, and is subject to the same standards as the environmental plan itself. The Act also allows developers to voluntarily submit an environmental management plan. However, information in the plan is not required to be published. Under Section 24, the Minister may withhold information from public inspection if it is determined that suppression of the information is in the public interest.

The *Constitution* also calls for the participation, consultation, and consensus of Papua New Guineans in the institutions of government, commerce, religion, and education.[174] It is therefore probable that the legislation enabling REDD will include measures for customary owner consultation prior to the development of projects.

The Policy Framework mentions the participation and partnerships of NGOs, civil society, resource owners, communities, and the private sector.[175] However, it does not provide details on how these partnerships will be facilitated, or the relative importance of each sector. Nonetheless their inclusion in the Framework Policy suggests that measures for information, participation, and partnerships will be included in the final REDD legislation.

Although PNG's laws must comply with the constitutional requirement for consultation with customary landowners, enforcement is often lacking. Engagement with communities is often based on scant information provided only to certain community leaders.[176] Furthermore, there are concerns over the effectiveness of community consultation, and whether landowners are often able to understand the agreements they are entering. A large basis for this concern is the fact that many landowners are uneducated and illiterate.[177]

Furthermore, there is debate as to whether PNG's laws properly implement the requirement to consult. Amendments to the *Forestry Act*, passed in 2005, are being challenged for violating the Constitutional requirement of consultation. The Petitioner, the Environmental Law Center (ELC) in PNG, alleges that the amendments repealing Section 59 of the Act which provided for community consultation in the preparation of FMAs is unconstitutional and therefore invalid. Additionally, the ELC alleges that because the Forest Authority's objectives[178] do not include consultation with customary owners, timber permits are similarly invalid. Regardless of the outcome of this challenge, participation continues to be an issue. Giving customary landowners more of a direct say in what happens with their natural resources will be an important aspect of subsequent REDD legislation.

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174 *Constitution*, S 5 (1).

175 Office of Climate Change and Environmental Sustainability, *supra* note 144, p. 22.

176 Colchester, M. and Ferrari, M.F. (2007). *Making FPIC – Free, Prior and Informed Consent – Work: Challenges and Prospects for Indigenous Peoples*, p. 9. FPIC Working Papers. Forest Peoples Programme.

177 International Tropical Timber Organization (ITTO). (2007). "Forest law and governance in Papua New Guinea in the context of sustainable forest management: Proceedings of the regional multi-stakeholder workshop on forest law enforcement and governance", p.14. Yokohama, Japan: ITTO.

178 *Forestry Act*, *supra* note 150, S 6.

Furthermore, the law does not require information to be published about a project that affects the environment. However, REDD projects are likely to have significant social impacts, and will likely qualify as a "project" if they result in a change of use by the customary owners concerned. The *Forestry Act* mandates environmental plans for timber permits, but it is not clear whether this requirement would apply to REDD projects. Therefore, either the *Environmental Planning Act* 1978 should be amended, or REDD legislation should clarify that environmental plans are mandated for REDD projects. This could assist in getting more customary land owners to participate in the REDD planning process, and ensure that communities at least have access to information about what is going on in their area.

Whether communities and customary landowners should be negotiating leasing terms as opposed to the paternalistic approach put forward by the government is controversial. On one hand, the government is more likely to understand the terms of an agreement, and has power to negotiate better terms.

However, the government's interests are not often aligned with the interests of local communities. Furthermore, giving direct consultation power back to communities allows for the development of administrative capacity to make better decisions regarding forest resources. Since 1991 when the *Forestry Act* was passed, the Forest Authority has held a virtual monopoly on negotiation of forest development projects. Seeing as customary communities are in the best position to act as custodians in a REDD project, it only makes sense to strengthen their ability to participate in the process.

Nevertheless, REDD partnerships have been developed in PNG. The Forestry Authority and the Environmental Department have a policy to consult the main stakeholders throughout their development of forest concessions and conservation areas.[179] This is done through public workshops and meetings. Attendees to these workshops include relevant government agencies, NGOs, institutions, and private actors. These workshops are used to develop strategies on sustainable development. One strategy that has resulted from this process is the DEC Reduced Emissions from Deforestation and Degradation Programme Framework 2008.[180]

7. Additionality

Unsustainable and illegal logging in PNG is widespread. Recent estimates by scientists at the University of Papua New Guinea suggest that at the current rate of deforestation, 83 percent of the country's commercially viable forests will have been exploited by 2021.[181] Commercial logging operations account for 48.2 percent of deforestation in PNG, whereas subsistence agriculture (45.6 percent), forest fires (4.4 percent), plantations (1 percent) and mining (0.6 percent) account for the

179 Johns, T. and Johnson, E. (Eds) (2009). "An Overview of Readiness for REDD: A compilation of readiness activities prepared on behalf of the Forum on Readiness for REDD", p. 52. Version 1.2 (March 2009). Falmouth MA, USA: Woods Hole Research Center.

180 *Ibid*.

181 Shearman, P.L. *et al*. (2008). *The State of the Forests of Papua New Guinea. Mapping the extent and condition of forest cover and measuring the drivers of forest change in the period 1972–2002*, p.7. Port Moresby, PNG: University of Papua New Guinea.

remainder.[182] Of these drivers, logging has gained the most attention, largely due to the poorly regulated nature of the industry and widespread claims of government corruption.[183]

The Government of PNG has not addressed additionality in the Framework Policy. Nevertheless, the *Environmental Contaminants Act* (ECA) 1978 makes it an offence for a person, his or her employee or agent to pollute water, the atmosphere or the land.[184] This law could be used to address leakage and enforce liability for leakage in the project area. The ECA does not include carbon as an atmospheric contaminant; however it does establish that pollution to the atmosphere will be considered to have occurred if a substance is detrimental to persons, flora, fauna, or property.[185]

Although carbon is not included as a detrimental substance in the ECA, its effect on climate change and the subsequent likely impacts on flora, fauna, and contagious diseases (impact on human health) provide room for statutory interpretation to include carbon as an atmospheric pollutant. It is likely that the introduction of REDD legislation and the necessary listing of carbon as a pollutant will see a liability mechanism, similar to the one in the ECA, introduced into REDD legislation.

Theoretically, because of the extent of commercial and illegal logging, demonstrating additionality under REDD should not be difficult. However breaches of the *Forestry Act* are common. *The Forestry Act* and the *Forestry Regulations* provide for enforcement action against violators. However, these laws are often not implemented. Therefore, timber companies often log additional areas outside their allotted permit and the FMA without scrutiny. This reduces the additionality potential, and if extensive enough will actually result in more carbon emissions. Logging restrictions must be enforced if REDD is going to have a significant effect on reducing emissions from reducing deforestation and degradation.

Furthermore, permit holders for REDD projects must not be allowed to get away with not paying sufficient royalties to customary owners. Otherwise, leakage is likely to occur.[186] If a permit holder can withhold distributing benefits to landowners, they may move outside the protected area to access the resources they need.

OCCES engagement with the issue of additionality is limited. A memo by its former Director refers to additionality to the extent that it must be addressed prior to certification under the Voluntary Carbon Standards.[187] A letter by the OCCES in support of the April Salome REDD project notes that the customary landowners have conserved their forests in anticipation of receiving remuneration from the creation of carbon credits. However there is no mention of logging rights over the land which would classify the area as avoided deforestation.[188] If PNG is serious about continuing to receive

182 *Ibid*., p.39.

183 Australian Conservation Foundation and the Centre for Environmental Law and Community Rights. (2006). *Bulldozing progress. Human rights abuses and corruption in Papua New Guinea's large scale logging industry*, p. 21. Buroko, Papua New Guinea: CELCOR; and Carlton VIC, Australia: ACF.

184 *Environmental Contaminants Act*, *supra* note 167, S 47 (1) (2).

185 *Ibid*., S (2) (c) (ii).

186 ACF and CELCOR, *supra* note 183, p. 21.

187 OCCES (2008) "Possible Demonstration Project in Kumala Doso". Letter to Managing Director, Nupan PNG Limited.

188 OCCES (2009d) supra note 171.

funding to build capacity, and to have certifiable credits recognized at an international level, it will need to address the issue of additionality directly.

8. Conclusions

The present state of forest governance in PNG suggests that REDD legislation must include measures to address its largest driver of deforestation, illegal logging. The government needs to expand on additionality, and develop some sort of liability mechanism with teeth to discourage violations.

Furthermore, PNG should address uncertainties in customary land tenure. The law should be changed to decrease the participation disparity between customary landowners, the government, and private entities when it comes to forest resource use. This will better ensure success of REDD, because it will foster more participation among the people who are in the best position to act as custodians over the conservation of forests. PNG's current mechanism for dispute resolution also lacks capacity to deal with issues that will arise with disputes over land and benefit-sharing agreements. Furthermore, increasing access to information on REDD projects will increase awareness among local communities about the importance of REDD, and the important role it has to play.

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