

Review of private sector and NGO experience in REDD+ projects iied

Isilda Nhantumbo and Marisa Camargo

REDD+ for profit or for good?

Review of private sector and NGO experience in REDD+ projects

Isilda Nhantumbo and Marisa Camargo

First published by the International Institute for Environment and Development (UK) in 2015

Copyright © International Institute for Environment and Development All rights reserved

ISBN: 978-1-78431-133-9 ISSN: 1605-1017

To contact the authors please write to: Isilda Nhantumbo isilda.nhantumbo@iied.org

For information on the Natural Resource Issues series please see inside the back cover of this book. For a full list of publications please contact: International Institute for Environment and Development (IIED) 80-86 Grays Inn Road, London WC1X 8NH, United Kingdom newpubs@iied.org
www.iied.org/pubs

A catalogue record for this book is available from the British Library.

@iied www.facebook.com/thelIED Download more publications at www.iied.org/pubs

Citation: Nhantumbo, I. and Camargo, M. (2015) REDD+ for profit or for good? Review of private sector and NGO experience in REDD+ projects. Natural Resource Issues, No. 30. IIED, London.

Design by: Eileen Higgins, email: ehdesign@virginmedia.com

Cover photo: Not your average carbon credit: A crocodile taken from the swamps in the forests of Mai Ndombe, Democratic Republic of Congo. © Isilda Nhantumbo At the international level, co-benefits of REDD+ include poverty alleviation and biodiversity conservation. However, on the ground, food security, income and employment are key. To what extent does the private sector cope with these multiple interests? All images © Isilda Nhantumbo

Printed by Full Spectrum Print Media, UK on 100% recycled paper using vegetable oil based ink.

Contents

Α	cknowledgements cronyms and abbreviations xecutive summary	ii iv V
1	Introduction	1
2	REDD+ demonstration projects: actors, motivation and boundaries 2.1 The private sector: concept, capital and boundaries 2.2 REDD+ business 2.3 Key observations of this chapter	7 7 11 12
3	A global assessment of REDD+ initiatives in Africa, Asia and Latin America 3.1 Geographical distribution of REDD+ projects and actors 3.2 REDD+ projects: what are the objectives and activities? 3.3 The role and participation of local land users in REDD+ projects 3.4 Key findings of this chapter	13 13 17 21 29
4	Looking deep into demonstration projects: rights and benefits 4.1 Bundling rights: risks and benefits for REDD+ 4.2 Land tenure in REDD+ projects 4.3 Sharing the benefits of REDD+ 4.4 Key findings of this chapter	31 35 42 53
5	REDD+ demonstration projects: building on existing experience or thinking out of the box? 5.1 Participatory forest management: where it fell short and where REDD+	55 55
	adds value 5.2 Payment for ecosystems services: right policies and incentives 5.3 Forest categories, carbon taxation and benefit sharing 5.4 Realising equity through REDD+ 5.5 Key findings of this chapter	58 59 62 63
6	Findings and conclusions	65
R	eferences	73

List of tables, boxes and figures

Table 1 Examples of benefit-sharing schemes: an array of formulas used	47
Box 1 Responses of project developers	5
Box 2 Institutions visited in DRC	6
Box 3 Private sector engagement and the FIP investment plan	17
Box 4 Community participation in various REDD+ projects in Indonesia	23
Box 5 Empowerment of communities in REDD+ projects	26
Box 6 Carbon rights in DRC and excluded groups	37
Box 7 Private sector REDD+ in Mai Ndombe project, DRC	50
Box 8 Premium for land use change	56
Box 9 The phases of investment in land use change	57
Figure 1 The complex landscape of REDD+ problems and solutions in Beira,	10
Mozambique	
Figure 2 Location of identified REDD+, projects by region and by country	14
Figure 3 REDD+ project developers	15
Figure 4 Percentage of projects in each region with evidence of some private	16
sector engagement	
Figure 5 Private sector led REDD+ projects	16
Figure 6 Area covered by REDD+ initiatives recorded in the database	35

Acknowledgements

This report was produced based on publicly available information about REDD+ demonstration projects in Africa, Asia and Latin America. The review of the 115 examples and the citations in various parts of the document is solely for the purpose of drawing lessons and encouraging debate on how REDD+ is being deployed and the issues that must be tackled for inclusive, equitable and sustainable outcomes. The mention of specific projects and, in some cases, the names of those involved is in no way intended to prompt negative criticism. The authors are grateful for the information that has been made available to them, which can contribute to evidence-based policy discussions and to paving the way for interventions that meet the ambitions of local people, civil society, academic institutions, donors, the private sector and other players. We are especially grateful to the project developers that responded to our request for further information about their initiatives: Mikoko Pamoja, Kenya; Amanalco, Mexico; Jayapura and Kapuas Hulu, Indonesia; Madre de Dios, Peru; Boden Creek, Belize; ADPML Portel - Para REDD, Para REDD and Ecomapua Amazon REDD project, Brazil; Carbon Tanzania/Mpingo Conservation Development Initiative and REDD in the Yeada Valley, Tanzania; Chaco-Pantanal ecosystem and the Paraguay Forest Conservation Project, Paraguay; the Ghana Cocoa Carbon initiative, Ghana; Konashen Community-Owned Conservation Area and Upper Esseguibo Conservation Concession, Guyana.

We also undertook a field visit to the Democratic Republic of Congo (DRC), where we discussed private sector engagement in REDD+ with the following national stakeholders: the Ministry of Environment, Nature Conservation and Tourism (forestry authorities, environment), the Ministry of Rural Development, National REDD Coordination (CN-REDD), the African Development Bank (ADB), World Wide Fund for Nature (WWF), the UN-REDD Technical Assistant, the International Union for Conservation of Nature (IUCN), Conseil pour la Défense Environnementale pour la Légalité et la Traçabilité (CODELT), the Central African Regional Program for the Environment (CARPE), Réseau Ressources Naturelles (RRN), the Forests People Programme (FPP), the Forest Investment Program (FIP), Green Peace, and Ecosystems Restoration Advocates (ERA).¹ We are grateful for the generosity of all those who gave their time and shared insights on the instruments and processes that enable private sector involvement in REDD+. The authors also wish to acknowledge the key role played by Guy Tshimanga a local expert in natural resources management who facilitated access to these institutions in the DRC.

The authors extend their sincere thanks for the insightful comments received from Floribert Nyamwoga Bayengeha Agro Business Consultant at CODELTI in the DRC; Tom Blomley consultant at Acacia Natural Resources Consultants in the UK, Adeline Dontenville of the European Forest Institute and James Mayers, Head of the Natural Resources Group at IIED. The authors equally thank Nicole Armitage and Kate Lewis for coordinating the production of this report, Eileen Higgins for the design and Sally Hinchcliffe and Anil Shamdasani for the detailed copy edit.

This report was funded by UK aid from the UK government, though the views expressed herein, as well as any remaining errors, remain the responsibility of the authors and do not necessarily represent those of the UK Government.

Acronyms and abbreviations

ACR American Carbon Registry
ADB African Development Bank

AFOLU Agriculture, forests and other land uses
BRICS Brazil, Russia, India, China, and South Africa

CAIT Climate Analysis Indicators Tool of the World Resources Institute

CARPE Central African Regional Program for the Environment

CBFF Congo Basin Forest Fund

CBFM Community-based forest management

CBNRM Community-based natural resource management CCBA Climate, Community and Biodiversity Alliance

CCX Chicago Climate Exchange
CDM Clean Development Mechanism

CF Community forestry

CN-REDD National REDD Coordination, DR Congo

CO2 Carbon dioxide

CODELT Conseil pour la Défense Environnementale pour la Légalité et la Traçabilité

CONAFOR National Forest Commission of Mexico

COP Conference of the Parties to the UN Framework Convention on

Climate Change

CRA Carbon rights agreement
CSO Civil society organisation
DRC Democratic Republic of Congo
ERA Ecosystems Restoration Advocates
FAS Foundation Sustainable Amazonas
FCPF Forest Carbon Partnership Facility

FICAFE Trust for Environmental Conservation of the Coffee Forests in El Salvador

FINASAGRO National Program for Agrarian Rehabilitation in El Salvador

FIP Forest Investment Program
FPIC Free, prior and informed consent
FPP Forests People Programme

FLEGT EU Action Plan on Forest Law Enforcement, Governance and Trade

FLUCC Forest, Land Use and Climate Change

FONAFIFO National Forestry Financing Fund of Costa Rica

GDP Gross domestic product
GtC Gigatonne of carbon

HCPF Holistic Conservation Programme for Forests in Madagascar

IFC International Finance Corporation

IGES Institute for Global Environmental Studies

INFAPRO Innoprise-FACE Foundation Rainforest Rehabilitation Project

IPCC Intergovernmental Panel on Climate Change
IUCN International Union for Conservation of Nature

KFCP Kalimantan Forests and Climate Partnership, Indonesia

KPH Kesatuan Permangkuan Hutan (Forest Stewardship Unit – Indonesia)

MBNP Meru Betiri National Park

MRV Monitoring, reporting and verification

NACOBTA Namibia Community Based Tourism Assistance Trust

NGO Non-governmental organization

NPV Net present value

NTFP Non-timber forest products

OECD Organisation for Economic Co-operation and Development

PDD Project design document

PES Payment for ecosystems services
PFM Participatory forest management

REDD+ Reduction of Emissions from Deforestation and Forest Degradation,

Conservation of Forests, Sustainable Forest Management and

Enhancement of Carbon Stocks

RF Radiative forcing

RPP Readiness preparation proposal RRI Rights and Resources Initiative RRN Réseau Ressources Naturelles

SA Social agreement

SERNANP National Service for Natural Protected Areas of Peru SESA Strategic Environmental and Social Assessment

TFCG Tanzania Forest Conservation Group

UN-REDD United Nations Collaborative Programme on Reducing Emissions

from Deforestation and Forest Degradation in Developing Countries

UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention for Climate Change

VCS Verified Carbon Standard
VER Verified emissions reduction
WRI World Resources Institute

WW Wildlife Works

WWF World Wide Fund for Nature

Executive summary

Despite slow progress to securing a robust international agreement on climate change, progress has been made on REDD+ during Conference of the Parties (COP) negotiations, notably in the Cancun Agreement and the more recent Warsaw REDD+ Framework. Bilateral and multilateral funding support has also generated and maintained momentum for both REDD+ readiness and testing at the country and project levels. This testing is vital to help clarify responses to questions such as who contributes to reducing emissions, how will performance-based payments be made and who is eligible for them, and how will results be measured and monitored? Such initiatives are funded through public and private sources, and most are also, in effect, testing the functionality of carbon markets. The results shed much light on the challenges and opportunities in the roles of the private sector, NGOs and government. The motivation of the research reported on here was to better understand private sector and NGO engagement in REDD+ in particular.

Who has what rights and benefits in REDD+ demonstration projects?

This report brings together available² information on REDD+ demonstration projects being promoted around the globe and analyses key enabling policy and legal factors. The analysis is focused on three aspects. First, questions of 'who', 'why' and 'where' are asked to try to understand the scope and scale of private sector and NGO involvement in REDD+ projects.

Second, we ask: 'Who holds the rights to carbon?' This is a key question as this new commodity is put into the marketplace (currently on a voluntary basis, and potentially on a compliance basis if and when a global agreement on this is reached). Understanding the answers – and acknowledging the various rights and interests of the different actors and the roles they might play – is vital in effectively addressing the drivers of deforestation and forest degradation. Rights were also considered in the context of the prevailing models of resource ownership (state, private and community), while recognising the blurred frontiers between them in practice. Are carbon rights clear, and are they linked with land and forest rights? Are community rights, in particular, being taken into account in the adjudication of contracts and other types of agreements for REDD+ piloting?

Third, analysis of the benefit distribution models in use, and their rationale, was undertaken. REDD+ is entrusted not only with reducing emissions, but also with delivering many other co-benefits, including poverty reduction. Knowing how revenues generated from carbon credits will be distributed is central to learning about and capitalising on the opportunities and challenges that scaling up REDD+ might present.

Although the analysis here covers projects led by both the private sector and NGOs, the focus is on the former. It is widely stated that businesses can contribute to developing markets for carbon credits, provide much needed technical expertise, and close the financial gap for REDD+. By understanding how the private sector has engaged in REDD+ thus far, we hope to also understand whether and how the sector's core objective

of profit maximisation is compatible with situations where cooperation with local land users is likely to determine how efficiently and effectively deforestation and forest degradation are addressed. Can the boundary and exclusionary principles underpinning most private sector investments (and also many NGO-led initiatives) equally deliver REDD+ requirements on additionality, permanence and the avoidance of leakage?

Database and case study analysis

The research started with the construction of a database, from online sources, summarising key information about 115 demonstration projects in 33 African, Asian and Latin American countries. The objective was to systematically analyse a large pool of projects to understand trends that are emerging in REDD+ deployment, in particular the participation of the private sector and NGOs. Following an initial summary of the information, project developers in each of the demonstration projects were contacted via email and were asked to verify the accuracy and completeness of the summary information prior to its analysis. The response rate was low – about 10 per cent responded with the requested verification and/or further information.

A field visit to the Democratic Republic of Congo (DRC) was subsequently undertaken to discuss the opportunities and challenges of private sector engagement in the implementation of REDD+ with stakeholders at the national level, including various government bodies, NGOs and private sector companies. Further research continues with local stakeholders to gather deeper insight on implementation at the project level.

Challenges in managing large areas with multiple competing interests in REDD+

The private sector and NGOs play an almost equal part in the development and testing of REDD+, leading 35 per cent and 36 per cent, respectively, of the projects in the database generated in this study. Private actors take on the roles of both investors and technical expertise providers in the development of projects, while NGOs rely mostly on development assistance and philanthropic sources of funding to pursue their work.

Defining the boundaries of resources and controlling natural capital is a basic requirement for investment. Control and exclusion tends to be fundamental in ensuring that resources are well managed. However, while REDD+ offers business opportunities, including potential profits, it seems to bring the notion of 'sharing' to the fore. Rights and commitments to sustainable land-use practices, in order to reduce emissions and augment benefits, all have to be shared amongst the different actors. REDD+ needs to demonstrate additionality and permanence, avoid leakage, and deliver co-benefits such as biodiversity conservation and poverty alleviation – and many projects need a large geographical coverage to benefit from economies of scale in doing this. It is the combined action of multiple land users with multiple interests that will yield results.

Distribution of private sector, NGOs and partnerships in REDD+ across continents

The 115 projects in the database are highly unlikely to represent the total number of initiatives in the three regions; many others may not be have made it on to our

database as they may not yet registered with the various standards at the time of data collection or may not have made enough information available to have been included. Twenty-one per cent of the projects are in Africa, 26 per cent in Asia, and 53 per cent in Latin America. Brazil, Mexico, Peru and Indonesia have the largest number of projects, while Cameroon and Kenya stand out among African countries. As noted above, the private sector leads in 35 per cent of the projects, while NGOs lead in 36 per cent. The remainder are led by governments (8 per cent) or by partnerships between two or more of these three actors (11 per cent), while in 10 per cent of cases it is not clear who leads. In terms of the geographical area involved, Asia is the largest region, with 37 per cent of the nearly 29 million hectares under REDD+ projects, followed by Africa.

Diverse objectives and fuzzy boundaries

Even though all projects aim to reduce emissions, they also have other objectives that vary widely, such as establishing private protected areas to generate carbon credits, providing opportunities for clients to offset their emissions, diversifying investment portfolios, offering technical services for the establishment of REDD+, or promoting innovation to inform the development of the compliance market. Developmental goals are also pursued, such as improved livelihoods, securing rights of indigenous peoples and local communities, and conservation of forests. The discourse is generally around delivering co-benefits and reducing emissions, but all projects work to establish boundaries and area-based protection, even where this is implicit. Project-level REDD+ is obliged to define these frontiers, as it requires a clear geographical unit of implementation and carbon accounting. Furthermore, clear boundaries are sought to enable demonstration of reduced emissions – the basis for payments on positive performance.

Engaging the 'drivers of deforestation'

Most projects involve communities in a number of ways, including planning, employment (in some qualified but mostly unskilled jobs), training, awareness- and capacity building, and cash and in-kind payments. In DRC, for example, the agreement between the private company running a project in Mai Ndombe and the government indicates that benefits to communities have to be in the form of investment in public goods and services such as schools and clinics. Direct benefits to individuals and households are acquired through technical know-how, fostered by the companies' extension workers, in more productive and resource-efficient land use practices.

Actors within communities tend to be acknowledged to varying degrees – from engaging their active participation, to maintaining them peripherally as passive cash recipients, to ignoring them. Questions arise in the latter case about the management of medium- and long-term risks, since the apparent absence of occupation of a forest rarely equates to the absence of use rights; assuming the contrary risks future difficulty in controlling leakage, and also conflict.

Another critical dimension overlooked in most of the projects is clear identification of who the beneficiaries are. Within the extensive landscapes in which the projects are implemented (some are over 0.5 million hectares, and even up to 4.4 million ha), there

are likely to be many more actors than just the observable 'communities'. The narrow interpretation of key stakeholders as being community-level smallholder users of land resources, albeit with a substantial cumulative impact, is problematic. The reality is that there are often multiple resources with multiple interests, from forestry businesses to beyond. Neglecting them is likely to render REDD+ initiatives ineffective.

It is important to address the local drivers of deforestation and degradation such as unsustainable agricultural practices and the harvesting of biomass energy. The DRC case study suggests also addressing drivers in which the corporate sector, including logging companies, plays an important part. There has been little progress yet in this area. Can corporate social responsibility and REDD+ certification schemes provide sufficient incentive for large companies to do the right thing? Leadership and risk taking is fundamental to achieving a reduction of emissions in these contexts. State policing is always likely to be overwhelmed, and more self-regulation and global citizenship is needed in private sector actions to mitigate the effects of climate change.

Control of carbon rights and the challenges of governance in REDD+ experiments

Delineation of the ownership of carbon rights largely determines the winners and losers in REDD+ implementation. Currently, REDD+ is confined by existing policy and legislation defining rights to provisioning and support services, such as the extraction of timber and the use of land for crop and livestock production. But many countries still have a policy gap when it comes to defining rules of access, use and management of regulating services, for example. As a result, existing legislation on land and forests is being used to outline norms for private sector engagement in REDD+. Prevailing tenure arrangements thus greatly influence how companies secure control of land for REDD+.

Over 40 per cent of the projects cover areas of up to 50,000 hectares, but close to 20 per cent cover areas of between 0.5 million and 4.4 million ha. Dominion over such vast areas could perhaps be justified in terms of ensuring effectiveness in addressing the drivers of deforestation. However, such large areas are also likely to have many land users who are active in deforestation and forest degradation and are hence likely to be affected by efforts to change land use practices and also to be potential claimants of benefits for contributing to addressing these drivers. Strategies for engaging these land users, beyond some members' communities and indigenous peoples, are unclear in the description documents for most projects.

A case study from DRC offers an example of a contract that contains clear provisions regarding carbon rights. The government signed an agreement that assigns rights to sell carbon to a private company. Further, the contract spells out the fiscal obligations of the private company to the *de facto* custodians of forest goods and services and to the state, and details the need for consultations with local communities to enable collective decision making about priority activities that reduce emissions. While this consultation constitutes an important step towards inclusive decision making about priorities and the use of community benefits, there

is no strong suggestion of the comprehensive application of FPIC (free, prior and informed consent) in the process of establishing and running REDD+ projects. However, the contracts reviewed showed that private sector companies are getting local communities or leaders to sign consent forms. A more transparent and inclusive process thus needs to be adopted to avoid elite capture, an effect claimed by some actors in DRC for instance. There is clearly room for improvement here. This might reflect variation in the emphasis of the different standards being used in REDD+. Despite all projects indicating that particular standards were being followed or worked towards, only 46 per cent of the projects were actually listed by the respective promulgators of these standards.

Strong tenure rights are key to the effectiveness of performance-based compensation mechanisms, and the effectiveness of taxation, participation and equity in benefit sharing are amongst the governance challenges that need to be addressed. Key approaches for improving governance of land tenure should be incorporated into climate change mitigation initiatives. These include understanding who the land use actors are in the landscape of rights, organising land users according to their claims and interests, engaging them in sustainable land use options, and ensuring that there is clarity of the costs and benefits of actors' involvement in changing land use practices.

Opaque benefits mysteriously distributed

Paying a premium for sustainability is deemed necessary, and the various benefit-sharing mechanisms employed in REDD+ projects borrow from existing experiences in participatory forest management, payments for ecosystems services, and high-value timber concessions. Provisions such as area-based taxes and tax on income from carbon credits, used for example in DRC, borrow from these instruments. In the case of DRC, community benefits are specified as being in-kind. This might be a good strategy for the initial years of the project, but most projects have long-term ambitions, with durations spanning from one to eleven decades. Over the course of such periods, it is certain that local communities' priorities will change. Capacity development, aimed at implementing sustainable land use practices that deliver emissions reductions, is only one of the benefits. It might be an important enticement for informing individual choices about land use options, but REDD+ initiatives need to sustain benefits to individuals and households to deliver robust changes in behaviour and practices.

Overall, only 23 per cent of all projects reviewed explicitly state that communities are likely to receive benefits generated from selling carbon credits. About 16 per cent of the projects provide some information on the proportion of the benefits that will be allocated to the different players, while the majority of the projects are silent on this. Some might be avoiding promising benefits in case of continuing weak and uncertain voluntary carbon markets and the absence of demand-driven compliance markets. Others might be avoiding the establishment of percentage shares that might be difficult to sustain in the face of the high costs of running the projects.

There is wide variation in the types and scales of benefit likely to be accrued by communities. The level of benefits suggests that tenure arrangements and the nature of the facilitator or developer are key determinants of the structure and shares for different actors. In Mexico, for example, projects give 60 per cent of the benefits of carbon credits to local communities, because these communities own the land and forests as well as the carbon and most projects are facilitated by NGOs. In Indonesia, 60 per cent of the benefits go to the project developer (private companies), while the government and local communities receive equal shares of 20 per cent. In DRC, the government impose a 50 per cent tax on (net) revenues from selling carbon credits. The variation across countries also reflects the diverse contexts. Further, the provisions and requirements are not uniform across projects within a given country. There is surely a need for clear policy at the national level, not least because of the long project durations. With some contracts running up to 110 years, 'silence' or variation in benefit distribution across projects within the same country might be risky for both the state and communities. Whilst REDD+ should provide a premium, rewarding the adoption of economically viable emission-reducing activities, knowledge of the level of such an incentive is fundamental to effective change in the behaviour of land users.

Benefit distribution and the taxation of income from carbon sales seem to depend on the perception of the primary purposes of REDD+ projects. They may be seen as conservation initiatives supplying public goods and services on the one hand, while on the other, some may see them as development endeavours, best pursued through a business approach. As a result, the tax on revenues from the sale of carbon credits varies between zero and 50 per cent. The highest tax is observed in the DRC case study, which is one of the few cases where community benefits are clearly spelled out, highlighting recognition of the role that local land users in the community play in changing practices and hence reducing emissions.

Publicly available contracts would better inform research and policy!

A small number of contracts are publicly available. Here we review examples from India, Malawi and Tanzania. All contained very strong provisions on obligations for land users in terms of change in land use practices and their role in REDD+. There were no explicit fiscal obligations and provisions on the sharing of benefits. A fourth contract was obtained from the private company running the REDD+ pilot in Mai Ndombe and from the government in DRC. Such transparency is commendable. Having more contracts in the public domain could help in understanding the provisions and rationale, and facilitate learning about how the REDD+ architecture is evolving in different contexts and what works best under different circumstances. Such transparency is not only necessary from a research point of view, but also to inform the development of government policy options and legislation.

Six main recommendations are identified:

1. Private sector-led projects, as well as those led by NGOs and governments, need to design robust systems to enable the participation of the myriad actors driving deforestation and forest degradation in landscapes where REDD+ is implemented. The total share of benefits for each stakeholder will be small, but

- perhaps that is the cost of sustainability that project developers, including the private sector, should be prepared to pay.
- 2. Effective participation requires information that is provided in a timely and effective manner, that is, presented in a form that is accessible to the different actors at the local level and allowing ample time for internal consultations. Migrants and women, for example, need to be part of the decision making process and this may require effectively targeted information and adequate time.
- 3. 'Free prior and informed consent' (FPIC) should be a sustained process. The large areas under REDD+ beg for inclusive models forging long-term partnerships and developing common goals amongst local actors, communities and small and medium-sized businesses, while reducing emissions and contributing to livelihood improvements. FPIC should not be a one-off event but rather a *modus operandi* of continuous engagement, negotiation and diffusion of potential conflicts.
- 4. Private sector engagement in the commercialisation of carbon stocks in forests requires the development of clear legislation on 'who owns carbon rights', the process of acquiring those rights, transferability, taxation and benefit-sharing mechanisms. At the national level there is a need to map and categorise forests according to carbon stocks and threats to them. The long-term nature of REDD+ contracts requires such clarity because conflicts may well arise in the medium and long term. Communities should own a stake in REDD+ investment based on the land they occupy and the forests they depend on, and this should be proportionate to the value of these resources.
- 5. Transparency of contracts and other relevant information related to REDD+ initiatives is fundamental to informing research and national and international debate on policy options. Therefore, the demands of confidentiality should not trump the greater public interest in developing effective policies and inclusive businesses for mitigating the impacts of climate change.
- 6. Governments need to move forward in developing national level instruments and not continue with ad hoc and site- or partner-based arrangements. This is needed to allow the private sector and NGOs to focus on developing models that acknowledge in a more pragmatic way the stakes and shares of different local players. Inclusive, viable and sustainable business requires collaboration and willingness to pay the cost.

The overall conclusion of this study is that, in addition to NGOs and governments, the private sector is increasingly experimenting in the implementation of REDD+ and testing the robustness of policy, legislation and markets. Even though the sector's participation is welcome to bring technical expertise as well as help close the financial gap, adopting inclusive models that acknowledge the rights of local people, the engagement of stakeholders beyond a segment of community members, benefit sharing, and FPIC as a continuous dialogue process will prove fundamental to successful REDD+. The private sector is engaging fast, now it needs to become more inclusive, not only to ensure the longevity and sustainability of its investments, but also to provide fair and equitable development opportunities to stakeholders in the larger landscape of REDD+ implementation.



Introduction

Anthropogenic sources of greenhouse emissions are a reality

The fifth report of the Intergovernmental Panel on Climate Change (IPCC, 2013) provides fresh evidence for the rapid change in climate and the role of anthropogenic activity:

"The atmospheric concentrations of carbon dioxide (CO₂), methane, and nitrous oxide have increased to levels unprecedented in at least the last 800,000 years. CO₂ concentrations have increased by 40% since pre-industrial times, primarily from fossil fuel emissions and secondarily from net land use change emissions. Deforestation and other land use change are estimated to have released 180 [100 to 260] GtC. Annual net CO₂ emissions from anthropogenic land use change were 0.9 [0.1 to 1.7] GtC yr–1 on average during 2002 to 2011. Human influence on the climate system is clear. This is evident from the increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing,³ observed warming, and understanding of the climate system" (pp. 9-10).

There are some linkages between emissions, the openness of countries to enabling investment and the growth generated as a result:

"Based on publicly available and widely accepted commercial country risk⁴ indicator, ... non land use change related greenhouse gas emissions (if) occur to a large extent in countries with low investment risk, i.e. which are attractive to external investors. The 20 largest emitters from the lower-risk group of countries (including developed and developing countries) cover roughly 70% of global greenhouse gas emissions (and generate 87% of the GDP), whereas the 119 countries from the higher risk group cover less than 24% of global emissions (generating 13% of the GDP)" (Harnisch and Enting, 2013).

The question is 'who' plays a role in both driving and reducing such emissions

Harnish and Enting (2013) highlight the significant policy implications with respect to the viability of mitigation projects. A large percentage of overall emissions can be abated via efficient financing in the rather limited number of countries that are

^{3.} Natural and anthropogenic substances and processes that alter the Earth's energy budget are drivers of climate change. Radiative forcing (RF) quantifies the change in energy fluxes caused by changes in these drivers for 2011 relative to 1750, unless otherwise indicated. Positive RF leads to surface warming, negative RF leads to surface cooling. RF is estimated based on in situ and remote observations, properties of greenhouse gases and aerosols, and calculations using numerical models representing observed processes. Some emitted compounds affect the atmospheric concentration of other substances. RF can be reported based on the concentration changes of each substance. Alternatively, the emission-based RF of a compound can be reported, which provides a more direct link to human activities. It includes contributions from all substances affected by that emission. The total anthropogenic RF of the two approaches are identical when considering all drivers (IPCC, 2013).

4. "Country risk grades" (Euler Hermes, 2012), as of December 2012, for 185 countries have been used and have been combined with greenhouses emission (including non-CO2 greenhouse gases, but excluding emissions associated with the land use, land use change and forestry sector and bunker fuels) and socioeconomic data for the year 2005 from the Climate Analysis Indicators Tool (CAIT) of the World Resources Institute (WRI, 2012).

attractive to international investments. Countries largely inaccessible to most commercial external investors are currently responsible for only a small fraction of global emissions. International grant financing can enable immediate deployment of low carbon investments.

The private sector plays a role in deforestation and forest degradation in the tropics. REDD+ has historically been driven by the public sector, at both global and national levels, financing the readiness process. However, engagement of the private sector is key to averting the current trends of emissions from land use and land use change. Public finance alone will also not be able to meet the large investment needs to support sustainable actions to reduce emissions from deforestation and forest degradation. The private sector is well placed to help close this financial gap while adopting practices that can yield long-term reductions in deforestation and forest degradation, hence reducing emissions. While governments of developed and developing countries are contributing resources towards the development of REDD+ strategies and setting up emission-reducing targets and the mechanisms for measuring, reporting and verifying changes, profit-making companies and NGOs are experimenting with different models for emissions reduction on the ground.

Incentive to do the right thing

The Reduction of Emissions from Deforestation and Forest Degradation, Conservation of Forests, Sustainable Forest Management and Enhancement of Carbon Stocks (REDD+) is a mechanism that offers performance-based incentives or compensation for actions and results mitigating the impact of climate change. The international grant financing mentioned by Harnish and Enting (2013) is necessary to stimulate higher-risk investment, in particular to encourage developing countries to adopt sustainable land management and low-carbon development paths. REDD+ is not designed to address directly the contribution to global greenhouse gas emissions by countries offering a lower risk to investors (i.e. developed countries, emerging economies and developing countries with policies reducing red tape to attract foreign investments). The success of the REDD+ mechanism, however, depends on the ability and commitment of these lower-risk and higher-emitting countries to fund compensation for sustainable land investments in developing countries. More sustainable solutions to climate change challenges need a combined effort from all (developed and developing) countries. Meeting the cost to the world economy of climate change caused by deforestation - US\$1 trillion per year by 2100 (Eliasch Review, 2008) - is only part of the solution.

The Eliasch Review (2008) estimated that approximately US\$17-40 billion in such investment might be needed per year. However, pledges have been dwindling from the initial US\$7 billion. The pledges⁵ of public funds through UN-REDD and FCPF up to early 2014 totalled US\$587 million, of which only 22 per cent has been disbursed. The pledges rise to US\$2395 million when including other funds such

^{5.} The pledges and disbursements where calculated by the authors are based on information compiled in Global Witness (2012). The reports presents the amounts pledged, deposited, approved and disbursed for each of the funds mentioned.

as the Forest Investment Programme, Congo Basin Forest Partnership and the Amazon Fund. The combined disbursement, however, is a meagre 8 per cent.

REDD+ beyond carbon

REDD+ is expected to reduce emissions from forest loss as well as generating other co-benefits, such as conserving biodiversity and reducing poverty. At times this appears to be placing a mammoth demand on REDD+ as a panacea for sustainable development goals. Yet REDD+ has the potential to promote a landscape-level integrated approach to land use for development. REDD+ can help address fragmentation in land use resulting from disjointed decisions at the macro as well as the micro level. Land use is rarely based on realising its optimum potential in terms of offering the most sustainable delivery of goods and services. Only concerted efforts by all actors across all economic sectors and at all levels can address the underlying causes of the rapid change in climate. Integrated land use planning ought to be part of the solution.

Cross-sector coordination of all actors is fundamental for successful REDD+

REDD+ offers a renewed opportunity for coordinated and complementary roles for policies across sectors at all levels. Climate change mitigation and adaptation requires an understanding of key actors and their roles, as well as the short- and long-term benefits and costs borne in the process of changing land use patterns. The Warsaw REDD+ framework highlights amongst its seven decisions the need for coordinating finance as well as actors, and acknowledges that the private sector plays an important role in achieving REDD+ goals. Also, the need for reporting on safeguards ensures that the risks to local people are monitored and mitigated.

UNEP (2011) provides several reasons why private sector engagement is critical to halting climate change, particularly the change resulting from deforestation and forest degradation. Price incentives are needed to stimulate investment in sustainable forest management, encourage investment in sustainable commodity supply chains and also to change the behaviour and practices of the private sector when pursuing investments.

Walker et al. (2013) highlight the importance of trade and acknowledge that demand for various commodities is the key driver of change in forest cover. They emphasise that all actors along the value chain play a part in addressing the underlying causes of deforestation and forest degradation, and call for consumers to be willing to pay a premium for sustainability. In the long run, this may also allow suppliers to invest in delivering deforestation-free commodities at a lower cost.

Scope, objective and methodology of the study

REDD+ uses 'national' boundaries as the ultimate accounting geographical unit. However, in the interim, activities are being pursued to test the extent that carbon accounting and interventions reduce emissions, as well as the role of different players in addressing drivers at the sub-national, jurisdictional or even project level. The demonstration projects analysed in this study belong to the latter group.

In order to understand the extent of private sector engagement in the implementation of REDD+, we constructed a database of projects in Africa, Asia and Latin America. Based on the projects' publicly available information (mainly project design documents, or PDDs), we analysed who the players are, their objectives, the key issues addressed by the projects, target groups or participants, land-tenure arrangements and benefit-sharing mechanisms. In order to get a better understanding of the legal and institutional context for the engagement of the private sector in REDD+ implementation, we discuss a case study from the Democratic Republic of Congo (DRC) in some detail, particularly with regards to the legal provisions for tenure and benefit distribution in the private sector-led REDD+ projects.

Information available on REDD+ demonstration projects being promoted around the globe was gathered to analyse the key enabling policy and legal instruments. The analysis focused on three aspects. First, questions of 'who', 'why' and 'where' are asked to understand who the actors are, their objectives and their geographical distribution. The answers to these questions help in particular to understand the scope and scale of private sector and NGO involvement in REDD+ projects. Is the private sector among the frontrunners in REDD+ implementation? Is it indeed paving the way for closing the financial gap and contributing to strengthening the carbon market?

Second is the question of who holds the rights to carbon as this new commodity is put into the marketplace. Understanding this is vital to effectively address the drivers of deforestation and forest degradation by acknowledging the various rights and interests of different actors and the roles they might play. Rights were also considered in the context of the prevailing models of resource ownership (state, private and community), while recognising the blurred frontiers between them in practice and on the ground.

Third, an analysis of benefit distribution models in use and their rationale was undertaken. REDD+ is entrusted not only with reducing emissions, but also with delivering on other co-benefits, including poverty reduction. Knowing how revenues generated from carbon credits will be distributed is central to learning and capitalising on the opportunities and challenges that scaling up REDD+ might present.

To seek answers to the above questions, a list of projects was gathered from third-party standards and selected REDD+ databases. The standards considered were: (1) the Verified Carbon Standard (VCS); (2) Plan Vivo; (3) Carbon Fix; (4) the Climate, Community and Biodiversity Alliance (CCBA) Standard; (5) the American Carbon Registry (ACR); and (6) the Chicago Climate Exchange (CCX). The databases elected were: (1) the Forest Carbon Portal project inventory; (2) the

^{6.} Between 20 and 23 September 2012.

^{7.} On 23 September 2012.

^{8.} On 23 September 2012.

^{9.} On 26 September 2012.

^{10.} On 26 September 2012.

^{11.} Operational projects listed at www.forestcarbonportal.com/projects (accessed 27 September 2012).

Institute for Global Environmental Studies (IGES) REDD+ database;¹² and (3) the REDD Desk database.¹³ This range of sources allowed as wide a range of projects as possible to be captured, and it also allowed information to be complemented and compared in the case of projects listed in more than one source.

A detailed review of information on each of the demonstration projects was conducted to populate an Excel worksheet with the following fields: location; land area (hectares); year of establishment; expected operational lifetime; objectives; rights to carbon or land and forests; project funding and costs; actors involved (leading institution(s) and partners); target group; role of local communities; methodology and standards (mentioned in the project document and verified registration on the standard); activities promoted; expected volume of carbon sales; benefit sharing; type of market sought (voluntary or compliance market); sources of information, including media; sources of funding; and type of contractual agreement.

The initial sources of this information were: (1) the PDD or another project description document; (2) information available on the main project developer's website; (3) information available on partner websites; (4) interviews carried with project developers/financiers and available in the media; and (5) information requested by the authors of all project developers (through e-mail). The purpose of using online material as a primary source was to systematically analyse a large pool of projects to understand emerging trends. However, there was a risk that the information available might not have been complete or up to date.

Subsequent contact via email with project developers in the 33 countries covered by this review where demonstration activities are taking place aimed at reducing errors resulting from inaccurate or out-dated information. Each of the project developers was asked to verify the accuracy and completeness of the summary information gathered on the project prior to the analysis conducted by the authors of this report. The level of response was low only 10 per cent responded to our request, and not all were able to provide additional information (see Box 1).

Box 1. Responses of project developers

Verified existing information and provided additional information:

- 1. Kenya: Mikoko Pamoja
- 2. Mexico: Amanalco
- 3. Indonesia: Jayapura
- 4. Peru: Madre de Dios
- 5. Belize: Boden Creek
- 6. Brazil: ADPML Portel Para REDD
- 7. Brazil: Para REDD
- 8. Tanzania: Carbon Tanzania/Mpingo Conservation Development Initiative
- 9. Tanzania: REDD in the Yeada valley
- 10. Paraguay: Chaco-Pantanal ecosystem
- 11. Paraguay: The Paraguay Forest Conservation Project
- 12. Brazil: Ecomapua Amazon REDD project

Offered to verify the information, but were unable to do so:

- 13. Ghana: The Ghana Cocoa Carbon initiative
- Guyana: Konashen Community-Owned Conservation Area and Upper Essequibo Conservation Concession
- 15. Indonesia: Kapuas Hulu

^{12.} Available at http://redd-database.iges.or.jp/redd/ (accessed 15 November 2012).

^{13.} Available at www.theredddesk.org (accessed 1 December 2012).

The assumption is that understanding the intentions expressed in the project documents can also help in anticipating the changes that might take place during the course of project implementation over the coming years. REDD+ is evolving rapidly and the learning will shape policy and practice. Taking stock of progress and original intentions as projects progress will help draw out lessons for both policy and practice.

The field visit to DRC¹⁴ was undertaken to discuss the opportunities and challenges of private sector engagement in the implementation of REDD+ with stakeholders at the national level (Box 2), including various government bodies, NGOs and private sector companies involved in REDD+. This report reflects discussion at this level only. Research continues at the project level to gather insights on the views of local stakeholders on REDD+ deployment and potential impacts.

This report includes a brief reflection on the concept of the private sector in the context of REDD+, and then describes the findings from the database of REDD+ projects. It discusses the issues of tenure, in particular pertaining to carbon rights and benefits distribution, and discusses the lessons for REDD+ from participatory natural resources management and payments for ecosystems services. Finally, it provides conclusions and recommendations drawn from this analysis.

Box 2. Institutions visited in DRC

- Ministry of Environment
- Nature Conservation and Tourism (Forestry authorities, environment) and Ministry of Rural Development
- National REDD Coordination (CN-REDD)
- African Development Bank (ADB)
- World Wide Fund for Nature (WWF)
- UN-REDD Technical Assistant
- The International Union for Conservation of Nature (IUCN)
- Conseil pour la Défense Environnementale pour la Légalité et la Traçabilité (CODELT)
- Central African Regional Program for the Environment (CARPE)
- Réseau Ressources Naturelles (RRN)
- Forests People Programme (FPP)
- Forest investment Program (FIP)
- Green Peace, Ecosystems Restoration Advocates (ERA)

NB: ERA was contacted before becoming ERA Congo

^{14.} Three case studies were selected to further the understating of the local context (policy, legal and institutional) that governs the engagement of private sector in REDD+, in particular. The Democratic Republic of Congo, Mozambique and Tanzania were selected to cover both the tropical and drier forest types as well as to capture the high level of interest in implementing REDD+ from the private sector (for example, in Mozambique). However, this report only discusses the results from DRC, the other two cases will be considered in a separate report.

REDD+ demonstration projects: actors, motivation and boundaries

There are myriad actors in the REDD+ landscape that should be taken into account during project design and implementation. These include not only project developers (private sector actors and NGOs), but also local communities (including women and other marginalised groups), national and provincial governments, small and medium-sized enterprises and other relevant actors.

This chapter clarifies the concept of the private sector, discusses the distinct realm of operation including capital control and clear and exclusionary physical boundaries, and also discusses the REDD+ business. These issues will be discussed again in more detail in later sections of the report.

2.1 The private sector: concept, capital and boundaries The concept

This section defines the private sector and highlights the issues that are likely to shape its engagement in REDD+: profit making, addressing the drivers of deforestation and forest degradation, and control over different types of capital in order to maximise profits.

The private sector is generally defined¹⁵ as that part of the economy not controlled by government; in other words, the segment of the economy run by individuals or groups, including households and corporate entities, investing in economic activities with the objective of generating profits.

The private sector encompasses more than just formal businesses (OECD, 2001). Individuals and households, both rich and poor, also operate as private economic actors when they consume goods and services or sell their labour, farm, or produce, goods and services. The OECD has also used a broader definition of the private sector covering "all service and funding providers working outside governments", which includes NGOs, the for-profit private sector, foundations, voluntary contributions and private academia (OECD, 2003).

In this report, we refer to the private sector using the strict notion of for-profit entities, including financing charities and foundations.

The private sector and NGOs are both heavily involved in REDD+ operations across the globe, and there is an acknowledged comparative advantage of their involvement. The assumption is that the *private sector* will contribute to closing the financing gap¹⁶

^{15.} See the OECD's definition in its Glossary of Statistical Terms (http://stats.oecd.org/glossary/detail.asp?ID=2130).
16. Forest Trends (2014) indicates that the share of REDD+ in voluntary carbon markets reached 38 per cent in 2013, followed by wind energy (24 per cent), clean cook stoves (7 per cent) and afforestation and reforestation (4 per cent).

for REDD+, lend technical expertise, and steer the development of carbon markets that can sustain and reward demonstrated performance. On the other hand, NGOs are perceived to be neutral and philanthropic players whose objective is to help communities prepare for and become involved in REDD+ implementation. Not-for-profit organisations such as NGOs tend to act more as intermediaries in the carbon market. They are also often driven by the need to support local land users to participate in the market or access compensation from public funds. Both players, nevertheless, need to balance their books and both strive to maximise net returns, albeit for different reasons (one to satisfy shareholders and the other to cover sustenance costs).

The government generally creates regulations and provides incentives to enable the private sector to operate, rather than exerting strict control over it. Its role depends on whether the economy is largely decentralised and market oriented, or centrally controlled. Under either model, however, public-private partnerships are formed. The government often has an interest in the provision of social services and some of these are best run in partnership with the private sector – for example, supplying utilities in urban areas.

Inclusive business models pave the way for extending partnerships to other actors, such as small-scale land users. Partnerships involving the government or the private sector and local land users often bring the latter into the mainstream economy. Access to financial capital, know-how and technologies can enable them to augment their scale of production and refine their products, giving them access to niche markets. More productive and efficient use of natural resources will help address forest loss, and small-scale producers have a role to play.

It is important to understand the business models that are dominant in the context of REDD+, as this is also likely to shed light on the actors that control the resources, which include not just the land, trees and forests, but also carbon rights. Who controls these will help determine who the winners and losers are in any REDD+ initiative.

Capital for profit making

The private sector generally requires control over its capital, including physical, financial, natural, human and social capital. Decisions about investment often require infrastructure (buildings) within which management decisions are made, and technologies that add value to raw materials are located. Raw materials themselves often come from natural resources such as the land, forests, water, fisheries and minerals.

Financiers – including banks, governments and individuals – provide resources for the purchase of materials, technologies and human capital to transform natural capital into goods and services that can be sold. Companies' social capital includes their employees, but more important is their networks of suppliers, intermediaries and consumers that contribute to the generation of value and profits.

The value chains and structure of costs associated with a product determine the net benefits/profits derived. The value chain of carbon credits usually involves

'producers' – i.e. players from the private sector that are establishing the REDD+ projects – who often also link directly with buyers. In other cases, especially where projects are led by NGOs, there may be other intermediaries involved. Understanding the players along the value chain is important, but this report does not explore this in detail. Bernard *et al.* (2012) analyse the supply chain (project development and implementation, brokers in carbon credit trading and retailing, supply of technical expertise and capacity building, auditors for validation and certification as well as buyers) of REDD+ initiatives. Instead, we focus our analysis on understanding how rights and benefit sharing shape the experimentation of REDD+ by the private sector, and in some cases also NGOs.

Access and exclusion: determining the actors and beneficiaries

Defining the physical and conceptual boundaries of a REDD+ investment can be a challenge. Several drivers and actors prevail within the boundaries of any landscape. The REDD+ space has many players, some contributing directly and others indirectly to deforestation and forest degradation. They all should be part of the solution. To effectively reduce emissions all actors need to be on board – the question is whether this is currently happening.

Defining reference levels within clear boundaries is a critical aspect of REDD+ for all demonstration projects, as it is for national, sub-national or jurisdictional level interventions. This report does not discuss this aspect much further, but the value of private sector and NGO REDD+ participation will be determined by the efficiency and effectiveness in addressing the drivers in a way that generates a net reduction of emissions.

The premise is that REDD+ delivery models need to look at different actors and understand the extent of their control over resources, their behaviour and their practices. How do the private sector and NGOs establish the boundaries of their projects? What roles do the other land users play in private sector REDD+? Will the business models deliver a reduction in emissions and co-benefits? Adopting a landscape approach with inclusive, viable and sustainable models is critical.

Control over natural capital at the exclusion of other users is key for the private sector operations. Private companies need to be assured of the availability of the resources to feed their industries and ensure a return that warrants a long-term investment.

NGOs facilitating REDD+ projects also need to define the project boundaries in order for communities to secure their claims to rights over an uncontested area. Exclusion underpins who can benefit from the extraction or conservation of forest resources.

Effectively tackling deforestation and forest degradation requires addressing the underlying causes. The drivers can be sectoral – including unsustainable forest harvesting and illegal logging – and extra-sectoral – comprising agriculture, mining and infrastructure. Other drivers include inconsistent laws across sectors or poor law enforcement, or disincentives for sustainability, such as low royalties and taxation.

Local households and groups within communities also make decisions to extract natural resources for their livelihoods. They often lack the financial capital to make meaningful investments in technology for efficient extraction and processing, as well as for the sustainable management of the resource base. In essence, all above mentioned actors require a sense of control of the territories and resources.

Figure 1 illustrates the multiple drivers and actors that REDD+ needs to take into account in one part of Mozambique (the landscape development corridor of Beira). Variations of this figure could be created for other contexts in which REDD+ is implemented within one country (at the sub-national or jurisdiction level) and certainly across different countries. Several REDD+ projects cover areas that are large enough to make economic sense and be financially viable and capable of controlling leakage. They have the potential to generate enough carbon credits to cover their operational costs and capital investments. Project boundaries are critical not just to making projects financially viable, but also to defining the way in which they engage with the other actors and who is included.

Figure 1. The complex landscape of REDD+ – drivers and actors, problems and solutions



Source: Nhantumbo, 2013.

The critical questions that REDD+ projects need to answer are how they will address these drivers, how the different actors will participate, what rights they hold and what benefits they can derive or claim. The more inclusive their approach, the more likely it is that initiatives will achieve additionality and permanence and avoid leakage, as well as address distributional challenges.

Can one player control this diverse landscape of actors, or provide incentives to ensure that REDD+ meets its goals? Private sector engagement in REDD+ projects could potentially establish an extended concept of conservation in which an investor plays a stronger role in enforcing rules about access. In these situations, how are the rights of the various actors protected?

For example, in Mozambique one company submitted a request covering an area equivalent to 19 per cent of the whole country to implement a REDD+ initiative, and another covering more than 50 per cent of a province (Nhantumbo, 2011). In such enormous landscapes, it is inevitable that the rights and interests of other people and businesses will be infringed. How these parties are brought together to find a joint solution is the key to successful REDD+ projects, as opposed to conflict generating projects or ones where many have to address the drivers but few benefit. NGO-led REDD+ projects also tend to focus attention on the community and not on other actors. Approaches that isolate land users entail risks, including high risk of pressure from those who are deliberately left out.

2.2 REDD+ business

Paying for intangibles

Traditional investment generally follows a pattern of transforming tangible raw materials into tangible products, for example the extraction and processing of timber.

Lack of (or poor) management has precipitated the degradation of natural resources and has eroded related ecosystem services, such as the protection of watersheds, biodiversity, landscape beauty and carbon sinks. The notion of conserving services by paying for them was introduced a few decades ago (Faerron *et al.*, 2012), with countries like Costa Rica and Mexico pioneering the development of policies to enable land users to maintain or enhance, rather than deplete, ecosystem services.

Payment for ecosystem services (PES) is a mechanism that acknowledges the value of these services and compensates land users for adopting sustainable practices

^{17.} Achieving additionality means that REDD+ interventions go beyond what the countries and communities would do to reduce deforestation and forest degradation without the REDD+ mechanism; it is the incremental benefits of implementing REDD+ that count. In other words, one needs to understand the 'with REDD+' and 'without REDD+' scenarios to gauge the added benefit.

^{18.} Permanence highlights the fact that interventions to reduce emissions should not be temporary, but rather form a consistent and irreversible development path towards zero deforestation.

^{19.} Leakage is the potential displacement of emitting activities to elsewhere outside the boundaries of the REDD+ project. This can relate to frontiers outside a jurisdictional or sub-national level where implementation is taking place, or indeed outside national boundaries. There is a risk of exporting emissions to other countries as a result of stringent measures to curb deforestation in a particular country.

that generate them. REDD+ borrows the notion that compensation will drive the 'supply' of practices that reduce deforestation and forest degradation. Emissions are a global public 'bad' that can be reversed or mitigated through the deliberate generation of public goods (that is, reduced emissions or the benefit of a relatively stable climate).

Types of investments being made in REDD+ projects

In any discussion of private sector engagement in REDD+, it is important to unpack the sort of investments being made.

The actual meaning²⁰ of investment in REDD+ initiatives can include a number of activities, such as establishing socioeconomic baselines, assessing carbon stocks and defining reference level scenarios, identifying and implementing emission-reducing activities, establishing monitoring and verification systems, identifying markets for carbon, and trading carbon. Is the cost of undertaking these activities sufficient for an investor to claim all or most of the benefits from traded carbon benefits? Are these benefits taxable in the same way that the extraction of tangible natural products is? What type of licences and/or contracts are signed and what are the obligations and rights of the parties (e.g. control over land and forests, over carbon alone, or a combination)? These questions are addressed in Section 3.

2.3 Key observations of this chapter

The private sector and NGOs (for the sake of the communities they work with) require ownership/clarity of rights and control over capital, including natural capital (forest lands in this case), in order to make and uphold long-term business decisions and investment. The size of that capital has to be large enough to ensure observation of the three REDD+ requisites: additionality, permanence and control of leakage. The challenge lies, however, in managing the existing multiple players and multiple interests within these large landscapes. Understanding the roles of the various actors in deforestation and forest degradation, their willingness to change practices in order to reduce emissions, and the benefits of doing so will be paramount to successful REDD+ testing on the ground. REDD+ projects implemented by the private sector and NGOs needs to be inclusive to secure long-term emission reductions and benefits for all involved.

^{20.} Not in a theoretical sense, but in a pragmatic sense of the type and level of capital (physical, financial, human, social and others) used to generate the benefits from carbon credits.

A global assessment of REDD+ initiatives in Africa, Asia and Latin America

The REDD+ mechanism has been discussed as part of the United Nations Framework Convention on Climate Change (UNFCCC) since the Eleventh Conference of the Parties (COP 11) in Montreal in 2005. UNFCCC negotiations have agreed a number of milestones, including the definition of REDD+, the preparation process, the need for safeguards and a jurisdictional approach, and the Warsaw REDD+ Framework, but agreeing on an all-encompassing final document on climate change will bring clarity and encourage further interest in implementing the mechanism.

Private sector interest in generating, selling and buying REDD+ credits has been erratic in response to the still-weak carbon markets and the slow speed of the international negotiations (Cundy, 2012). Peters-Stanley *et al.* (2012) report that after a good performance in 2010, the volume of REDD+ credits transacted in 2012 fell in comparison with the previous three years. Developers argued that the mechanism had slowed down due to operational reasons and more complex national political processes.

In general, private sector and NGOs experience of delivering REDD+ projects is still relatively limited. It is important to learn from early adopters what such involvement will actually entail and the results that it will generate. Different sectors of society will have their own interpretations of REDD+ and the responsibilities that fall to different stakeholders. Large companies like Unilever or Kraft for example, may look to their suppliers to conduct deforestation-free activities. Unilever, has called for businesses to 'step off the sidelines in the fight against climate change' (Unilever, 2014).

3.1 Geographical distribution of REDD+ projects and actors

In order to contribute to a more informed and evidence-based debate on the role played by different actors, it was important to document the REDD+ initiatives being undertaken in Africa, Asia and Latin America. From the sources selected, we encountered 115^{22} projects implementing REDD+ across these regions, with durations spanning from less than 10 years to 110 years.

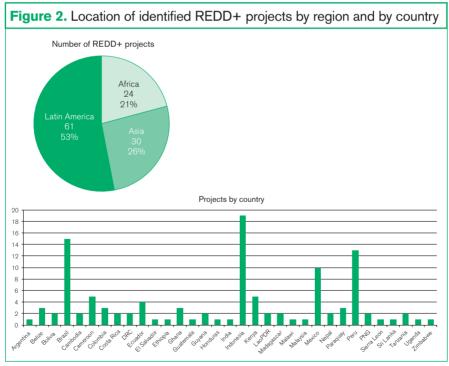
^{21.} Jurisdictional REDD+ initiatives are decentralised initiatives or ones in which local government is closely involved or may lead. This seems an advantageous type of pilot initiative, because it matches with a public administration entity, thus integrating better the multi-sector dimensions of climate change action. In practical terms, this form of REDD+ approach blends better local action with public policy, and may actually become favoured for its mix of project and governance elements. In fact, guidance and methodologies for jurisdictional REDD+ projects are emerging in the voluntary carbon market community (e.g. VCS, ACR) in recognition of this new approach and its advantages. Brazil and Indonesia are advancing the jurisdictional approach to REDD+, which fits the 'sub-national' scale as endorsed in the UNFCCC agreements (Garí, 2013).

^{22.} The real number of REDD+ projects in these regions is certainly higher and most may not be registered with standards bodies.

The majority of projects make some reference to the standards they are following or wish to obtain certification from – the Verified Carbon Standard (VCS), the Climate, Community and Biodiversity Alliance (CCBA) and Plan Vivo feature prominently. The standards, however, only listed 46 projects (40 per cent of our list of 115). This implies that the remaining projects either only claim to be following internationally accepted methodologies or have developed their own methodology.

Where are the REDD+ projects?

Latin America hosts the greatest number of projects, followed by Asia and then Africa. Four countries host the majority of the REDD+ demonstration projects between them: Brazil, Indonesia, Mexico and Peru (Figure 2). This might be explained by the fact that Brazil and Indonesia, together with the DRC, are home to the largest areas of tropical forests. This has given these countries a high profile in terms of developing readiness programmes and building on existing legal and institutional frameworks to demonstrate the extent to which emission reductions can be achieved. Well-developed enabling environments also include organised communities working on the devolution of forest and watershed management in Mexico and Peru. Their long history of implementation of payments for ecosystems services (Faerron et al., 2012), certainly contributes to REDD+ testing on the ground.

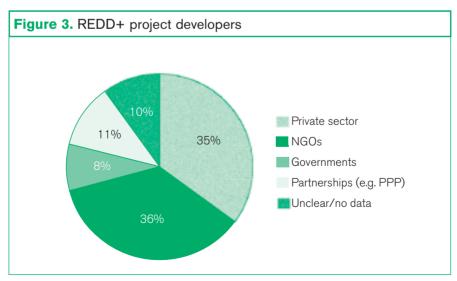


Source: Based on information from database compiled for this report

In Africa, Cameroon and Kenya host the majority of projects. Although at the time of collecting information for this report, the Democratic Republic of Congo did not have a large number of demonstration projects, it has been the subject of support from the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD), the Forest Carbon Partnership Facility (FCPF), the Forest Investment Programme (FIP) as well as from regional projects such as the Congo Basin Forest Fund (CBFF). There are several initiatives being pursued around key landscapes in the country involving different segments of the private sector. How REDD+ and low-carbon development evolves in the DRC is likely to have a very significant impact on climate change mitigation overall. This is the case despite the current high forest cover and low deforestation rate. With economic indicators such as a gross domestic product (GDP) of less than US\$300 per capita, the country needs to make big strides. Poverty is widespread despite the country's very rich natural resources (including its forests). The country has to consider numerous trade-offs in choosing a low-carbon development path. Policymakers face enormous challenges in making the right policy choices to reduce poverty, propel development and contribute to mitigating climate change impacts for the benefit of DRC and of the world as a whole. As such, we have chosen to look at DRC for a more detailed analysis of the policy and institutional arrangements that enable private sector engagement in REDD+ (highlights are found throughout this report).

REDD+ front runners: who are they?

As Figure 3 shows, 35 per cent of the projects identified are led by the private sector, while 36 per cent are run by NGOs. Public actors are involved in only 8 per cent of projects on their own, and 11 per cent in partnership with other actors.



Source: Based on information from database compiled for this report

Private sector participation in REDD+ projects is most common in Latin America (Figure 4), where coincidently private tenure is widespread.

Figure 4. Percentage of projects in each region with evidence of some private sector engagement

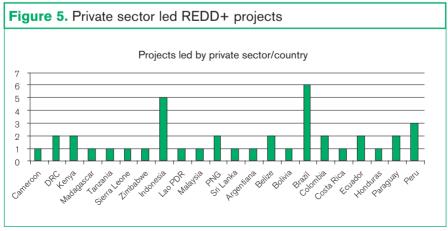
Private sector engagement

Africa 62%

Asia 73%

Source: Based on information from database compiled for this report

Figure 5 shows that Brazil, followed by Indonesia, has the most private sector-led projects. As in the overall numbers, Africa has the least private sector-led REDD+ projects. Despite the current investment influx in Africa, particularly in extractive industries, many African countries are still considered high-risk locations for investment. Many African countries are also still trying to establish clear policy instruments for REDD+ including safeguards for private sector involvement.



Source: Based on information from database compiled for this report

Interestingly, despite having a large number of REDD+ projects and previously having one of the highest numbers of afforestation/reforestation projects in the world (including under the Clean Development Mechanism, or CDM), Mexico does not apparently have any private sector-led REDD+ projects. This could imply that Mexico does not have conducive policy, legal and institutional provisions for external/large companies to operate, or else that the information on corporate engagement in REDD+ is not publicly available. On closer examination, however, it seems that the reasons for this lie more in a deliberate policy approach by Mexico. For example, it is clear that REDD+ in Mexico is considered part of an integrated development approach (Montero et al., 2014) in which ejidos²³ play a central role.

Mexico is a pilot country under the Forest Investment Program (FIP) and private sector participation in the forest sector is considered important (Box 3). According to the country's investment plan and REDD+ national strategy, the aim is to work mainly on priority sub-national areas (Early Action REDD+ Areas), which were selected based on pre-defined criteria. The aim is to concentrate the work in these specific areas, and to generate lessons that could then be replicated in other regions of the country. Therefore, one could conclude that Mexico does not seem particularly supportive of isolated REDD+ initiatives.

Box 3. Private sector engagement and the FIP investment plan

The Mexican investment plan highlights that the "private sector has been deeply involved in the design of the investment plan through the forest landowners (*ejidos* and communities), producer associations and private technical service providers.

The investment plan seeks to attract other private sector stakeholders through the creation of investment opportunities in and around forests. The financing mechanisms and the specific targeting of improvements along the value chains of forest products and services further create investment and partnership opportunities." ([FIP Mexico)

Private sector involvement may not always involve directly setting up and running REDD+ projects. The private sector plays a number of roles, including providing technical assistance for the development of initiatives (e.g. resource assessments) and for fulfilling the obligations of the different validation standards. Companies can also fund such initiatives through direct financial investments, philanthropic donations and supplying or buying carbon credits.

3.2 REDD+ projects: what are the objectives and activities?

In their objectives, the various project developers make it clear that REDD+ initiatives are expected not only to deliver reductions in emissions, but equally to contribute to other developmental goals. These goals include the development of voluntary carbon markets (including trading carbon credits), receiving revenues from carbon sales, providing an option for clients to offset their emissions, diversifying

^{23.} Not in a theoretical sense, but in a pragmatic sense of the type and level of capital (physical, financial, human, social and others) used to generate the benefits from carbon credits.

shareholders' investment portfolios, and promoting innovation in preparation for upcoming regulation (pre-compliance). Others focus on the provision of services to REDD+ projects, establishing a business model for REDD+ projects and sharing the lessons learned, using climate change mitigation to improve local livelihoods, and ensuring the long-term protection of rainforests by securing the rights of indigenous communities to land, life and livelihoods. This range of objectives reflects the wide variety of actors and interests in REDD+ projects.

Peace and security even form part of the motivation for investing in REDD+. For example, a government-led community forestry initiative in Oddar Meanchey Province, Cambodia, is partly intended to safeguard the country's border with Thailand, as well as to create private protected areas.

Other motivations include the following:

- 1. Purchasing land to enforce land use practices that help reduce deforestation
- The Rio Bravo Climate Action Project bought land in Belize in an effort to curb illegal logging.
- The Action Project against Global Warming in the *Guaraqueçaba* region of Brazil restored 20,234 hectares of degraded land through tree planting.
- Ecomapuá Conservação Ltda purchased an area of the Amazon forest in Brazil for conservation and restoration.
- In the Reserva de la Biosfera del Bosque Mbaracayu in Paraguay, the International Finance Corporation (IFC) was awarded title to 57,700 hectares of forest land after a local timber concession defaulted on a loan.

2. Financing the conservation and management of public protected areas and buffer zones through private sector investment

Governments have long used conservation areas to protect biodiversity globally. The International Union for Conservation of Nature (IUCN) World Commission of Protected Areas agreed a target for each country to set aside at least 10 per cent of its land area for conservation, and many of its members have pursued this target. REDD+ allows public institutions to conserve some fragile ecosystems that offer prime carbon storage, such as peatlands and mangroves. In many countries, protected areas have been funded by the corporate sector, including foundations and banks. In other cases, the private sector directly participates in their management.

- In Peru, the Field Museum received funds from Exelon Corporation and the Frankel Family Foundation to develop the Cordillera Azul National Park REDD Project. The government, through the National Service for Natural Protected Areas of Peru (SERNANP), is partnering with these corporations to fill the financing gap from public resources.
- Another project in Peru aims at reducing deforestation and forest degradation in the Tambopata National Reserve within the National Park of Bahuaja-Sonene, in the Madre de Dios region, to curb encroachment of agriculture. The initiative

- promotes sustainable land uses and alternatives for the generation of income.
- In Madagascar, the Holistic Conservation Programme for Forests (HCPF) include the protection of 350,000 hectares of forest area, restoring 20,000ha of degraded land, reforesting 5,000ha for biomass energy and transferring the management of 140,000ha of natural resources to local communities.

3. Conducting scientific research

- In Peru, carbon financing from the Los Amigos Offset Program intends to keep the forest intact while providing benefits to local people and enabling scientific research and training.
- In Paraguay, the *Reserva de la Biosfera del Bosque Mbaracayu* project has six different components, including a research programme with a laboratory inside the reserve and an environmental educational programme with a high school for girls from deprived backgrounds in the region.
- In Brazil, the Atlantic Rainforest Conservation Project has several objectives, including scientific research and the dissemination of methodologies used in the projects for replication elsewhere.
- In Madagascar, research into carbon sequestration in forests forms an integral part of the Holistic Conservation Programme for Forests (HCPF) and is being carried out in close co-operation with numerous Malagasy and outside partners.

4. Developing sustainable alternative income sources for local communities

- Some projects seek to develop alternative income sources that are compatible with nature conservation and the maintenance or enhancement of carbon stocks. Many conservation and development initiatives have been implemented over the years to promote sustainable management and conservation while improving the livelihoods and wellbeing of local communities. One of the main elements missing in many participatory forest management schemes has been incentives, in particular cash incentives to reward increased biodiversity, maintenance or the enhancement of non-provisioning ecosystems services. REDD+ may fill this gap.
- In Malawi, the Forest Conservation project in Nyika National Park and Mkuwazi Forest Reserve aims to avoid deforestation and forest degradation through the development of alternative income-generating activities for improved livelihoods.
- Community Payments for Ecosystem Services in the Congo Basin, in particular in Cameroon, aims to provide alternative income-generating activities to help alleviate poverty and improve livelihoods and enhance the ability of communities to cope with institutional, economic and natural resource changes.
- The Atlantic Rainforest Conservation Project in Brazil focuses on developing alternative income generation compatible with nature conservation.

5. Testing the '+' in REDD+

In Laos, Oji Paper is conducting a feasibility study to examine whether afforestation to secure raw materials for wood chips can also produce carbon credits in the context of REDD+ projects. Due to international negotiations by the UNFCCC, the handling of afforestation projects conducted under the REDD+ banner is clearly defined. Planting trees enhances carbon stocks and is one of the most effective methods of controlling deforestation and degradation in Laos, and this project may qualify for REDD+ if appropriate forest management and forestry practices are implemented.

Activities for reducing emissions

A wide range of activities are undertaken under the banner of REDD+. These include the following:

- 1. Integrated planning and carbon stocks
- Participatory mapping
- Land use planning
- Assessment of carbon stocks
- Integrating project activities into the national REDD+ process.

2. Emissions-reducing activities

- Promoting improved agricultural practices to increase productivity and lessen the need to expand farmland
- Promoting fuel-efficient stoves
- Promoting non-timber forest products (NTFP) for the generation of income activities
- Implementing forest management plans to reduce forest degradation
- Fire prevention, monitoring, and control
- Patrolling to ensure compliance with good management practices
- Ecotourism promotion
- Water resource development projects
- Clarifying land tenure
- Supporting the registration of private forests, community forests and communal land associations
- Building the local community's governance and administrative capacity, e.g. establishing community funds to support sustainable livelihoods
- Building social infrastructure
- Promoting education and health
- Establishing equitable benefit-sharing mechanisms.

Some of these activities address the drivers of deforestation through the promotion of sustainable land use activities, while others promote good governance systems in the forestry sector to inform the REDD+ process. This suggests that REDD+ is in fact about strengthening existing approaches to addressing the drivers of deforestation and forest degradation. The difference that REDD+ brings is the potential payments based on performance and the fact that the effectiveness of these activities in reducing emissions and generating co-benefits is being assessed, monitored and verified.

Private sector organisations, as well as NGOs, all acknowledge the importance of promoting other viable economic activities²⁴ such as more sustainable logging, sustainable harvesting of NTFP and sustainable agriculture, and generating carbon credits. The volatility of the carbon markets and the fact that a compensation mechanism is yet to be established stresses the importance of adopting such strategies REDD+ interventions need to be viable enterprises for the land users. Another important reason is managing the risk of non-permanence and leakage.

3.3 The role and participation of local land users in REDD+ projects

Most projects seek to engage local stakeholders living within the project boundaries or in its surrounding areas. Developers recognise that in many cases, communities are deforestation agents themselves, so they must be integrated into the project in order to guarantee its long-term impact and effectiveness in reducing emissions. It is critical to understand and address the underlying causes of such practices.

In the REDD+ initiatives analysed here, communities are involved in in several ways: participation in decision making, simply as employees, or as beneficiaries of awareness-raising and capacity-building programmes.²⁵

Participation in decision making

Private sector REDD+ projects make a deliberate effort to demonstrate their dialogue with local land users. The key question that is not clearly discussed, however, is the extent to which tenure rights shape the meaningful participation of communities, which are an important holder of natural capital in REDD+ projects. As such, their participation in decision making should be on an equal partner basis with project developers. Effective participation will result in a commitment to the goals of the project by local land users. Therefore, the processes and tools to ensure participation have to also be agreed at the beginning of the engagement of the parties. Failure to acknowledge this is likely to alter the effectiveness of REDD+ initiatives in reducing emissions in the long run.

Some projects take an inclusive and participatory approach to engaging communities in the design of interventions from the very start of the project, while others only mention active participation of communities during implementation.

24. The Forest Carbon Group AG initiates, finances, develops and markets forest projects throughout the world: "Destructive forestry practices will continue until more sustainable and profitable opportunities for producing timber, food and fuels are created. Therefore we need to develop business strategies that combine a sustainable timber industry, the production of non-timber products and bio-energy along with a more intensive but also more sustainable agriculture, and which also integrate ecological assets. That is why we combine the 'carbon finance' element in our projects with other funding options and revenue streams for the participating partners, companies and local communities. This enables us to provide multiple flanking measures to support our projects and thus minimise the investment risks. We see ourselves as part of a growing number of forward-thinking companies that combine carbon markets, environmentally sound agriculture and forestry, agroforestry and sustainable investment in order to enable sustainable land use in the long term" (retrieved from www.forestcarbongroup.com/unternehmen/profil.html on 11 March 2013).

25. Note that the projects used to illustrate the points do not necessarily assign just one role to the communities. For example, in Nepal: a pilot project to design and set up a governance and payment system for Nepal's Community Forest Management aims to demonstrate the feasibility of creating a REDD payment mechanism for community forestry (CF) by involving local communities – including marginalised groups – so that deforestation and forest degradation can be reduced by linking sustainable forest management practices with economic incentives. Communities will learn about REDD, receive training (on e.g. monitoring and forestry), and participate in the project activities.

The Community Payments for Ecosystem Services (PES) project in the Congo Basin in Cameroon treats community participation as a pervasive and prominent aspect of the project. It emphasises a community-led approach in all aspects of the project development and establishment process. Participatory methods have been used to elicit knowledge about land cover and use and threats of loss of forest cover and biodiversity, as well as in making decisions about land use and livelihood activities that can contribute to enhancing ecosystem services.

Also in Cameroon, the Conserving the Cross River Gorilla Landscape project in Takamanda National Park is piloting a landscape approach to reducing emissions from deforestation and forest degradation. The project plans to raise additional resources to foster more community involvement in planning and management processes and in the process of formalising land rights titles. This will build on community-based natural resources management in production forests (Council or Community Forests) and the development of co-management systems and structures for protection zones.

In DRC, various interviewees stated that signing social agreements is important, but the local population do not always understand the true extent of the area until restrictions are enforced. There were concerns expressed about the fact that local elites may use their power to take decisions with wider and longer-term impacts without involving interested parties in the decision making. Further development of tools for negotiation between communities and private sector has improved the process. While the negotiation is not aimed at discouraging investments, some did not go ahead as communities felt that they were not in their interest. There is always a need to strike a balance between simple rejection and using the process to improve the terms of investments and benefits to local people.

The information provided by companies to affected communities is often scant and varied. Some communities in DRC interpret REDD+ as 'selling O_2 and not CO_2 '. This is beyond anecdote and reflects the challenges of grasping this new concept. Such difficulty in understanding is not necessarily limited to communities or people with low levels of literacy. Awareness raising for effective participation needs to be undertaken more widely in all the countries concerned, but in the case of DRC the challenge is the sheer size of the country and accessibility. Stakeholders made it clear that training on REDD+ needs to take place beyond the capital cities. If communities are to participate, there must be prior investment in appropriate communication tools to enable them to capture the key information being transmitted. The absence of tools tailored to local needs and capacities results in cosmetic participation of community representatives and missed opportunities for negotiating adequate participation and benefits.

In Cambodia, the REDD+ feasibility study in the Prey Long district also contemplated following an FPIC process to strengthen governance across the area. The project rightly acknowledges that it is imperative to secure access to forest resources for local communities and other stakeholders while preventing deforestation and degradation.

The Rimba Raya ("Infinite Forest") Reserve project consulted village heads in the project area, who gave their tacit approval and signed off the project pending continued community involvement in project design and implementation. An essential element is the engagement of all stakeholders to secure a social buffer for the park and project area, thereby alleviating many of the external pressures that drive deforestation. The project proponents have created a framework for disseminating information about the project development and implementation process, including the envisaged support to community participation in all aspects of the project and opportunities for capacity building.

Projects in Indonesia (see Box 4) also involve communities participating in REDD+ projects through increased awareness to address the pressures on resources and the introduction of sustainable land use practices. Some projects consult only with leaders who sign agreements for REDD+ to go ahead in the name of the wider community. Others, anticipating conflicts, make strides to secure representation of different voices and interests in key decision-making bodies.

Box 4. Community participation in various REDD+ projects in Indonesia

Communities planning ways to address deforestation as part of decision-making bodies. The Forest Land Use and Climate Change in North Sulawesi (FLUCC) project in the Poigar Forest identified local communities as the main deforestation agents, and hence key to its reduction. One of the forest production and harvesting regimes in the country is Kesatuan Pemangkuan Hutan (KPH), or the Forest Management Unit (FMU). This forest management unit is generally held by local communities in co-operatives. More than 3 million hectares of land are managed under this system, thus establishing a strong network of local communities concerned with the forest. The approach adopted by the project is to involve communities in land use planning, in collaboration with all levels of authority and decision-making bodies.

Fostering collaboration and conflict management

The Kalimantan Forests and Climate Partnership (KFCP) intended to work with communities to identify livelihood alternatives, compatible with the overarching goal of reducing emissions, that are financially rewarding, sustainable, and sensitive to gender and social inequalities. Implementing partners focus on helping communities and government work together to resolve land tenure issues, to anticipate and defuse potential causes of conflict.

Communities to also take part in project evaluation

The Avoided Deforestation project in Malinau, East Kalimantan, also views the involvement of local communities in the project planning, implementation, monitoring and evaluation as crucial for successful credit generation. The project proponent, through a community development programme, facilitates community involvement, in accordance with the Climate, Community and Biodiversity Alliance (CCBA) standard.

Communities to voice their rights including right not to participate in REDD+ projects
The FY2011 Global Warming Mitigation Technology Promotion Project involving a survey of
mangrove forest states that decisions made by the project (1) shall invariably incorporate the opinions
of local residents including their right of decision to participate (or not) in project operations; and (2)
respect and guarantee to the fullest extent, the rights of residence and land use. The selection of the
individuals to join the groups/associations (*Kelompok*) is made irrespective of tenure arrangements,
gender and/or age and provides all residents equal opportunity.



Communities in REDD+ project areas, such as Mai Ndombe, includes people of different generations. While these children, pictured, are not part of decision making, they will be affected by the options taken by the current generation. Schools are one of the project benefits that directly impact their future through education and awareness on the value of forests.

The majority of project developers highlight that the importance of involving communities from the very beginning to avoid potential conflicts. The desire to mitigate potential risks plays a key role. Besides this aspect, one of the project statements indicated, for instance, that effective local community participation decreases the likelihood of leakage. This is fundamental for securing commitments to reducing emissions. The deeper question, however, is how effective this participation is in the long run. Its effectiveness is likely to be influenced by the understanding of the rights, stakes and benefits for communities in the project.

Awareness raising and capacity building

Knowledge transfer to communities is key. This could include the various concepts associated with REDD+, methodologies, socioeconomic and environmental impacts, mitigation measures and monitoring. Not only does it afford communities the information they need to take decisions, it can also create a space for project developers to learn about existing sustainable practices that can be enhanced.

A wide range of capacity-building activities are being carried out by REDD+ project developers. Some indicate only that they will deliver general training on resource use and wellbeing improvement, while others give more specific examples. The following training topics are drawn from a number of projects in El Salvador, DRC, Ethiopia,

Indonesia, Colombia and Northern Tanzania: climate change; sustainable management of resources, including improvement of coffee plantation systems to reduce deforestation; improved efficiency of biomass energy production and use; improved systems of crop and protein production (e.g. aquaculture) to reduce pressure on the forests; project monitoring and administration; specialised transfer of technologies, such as aerial monitoring of forest cover and carbon stocks; fire management; land use planning and land management; carbon accounting and monitoring of land use practices; enforcement of land uses and practices; and governance, particularly mechanisms for the effective and equitable sharing of benefits.

The Prey Long REDD+ project in Cambodia developed a training manual in Khmer to raise awareness on REDD+ and prevent any negative impacts. This manual is aimed at local leaders who can use it to explain REDD+ to their communities. Translating information and knowledge into local languages can greatly improve understanding and dialogue.

Literacy is also highlighted in Reduced Emissions from Deforestation and Forest Degradation in Community Forests, project in Oddar Meanchey, Cambodia. A series of meetings were conducted with stakeholders identified at the local and provincial level during the design process to explain the complexities of a carbon project. These engagement meetings can be long and costly in the short run, but are important for the success of REDD+ projects as they build common understanding and trust.

Box 5 captures capacity building and community empowerment initiatives from various project statements.

Acting as employees

The private sector is responsible for job creation that sustains local and national economies. NGOs are also making increasing contributions towards this. Employment created through REDD+ implementation is an important component of the generation of co-benefits, including income generation and engagement in alternatives to destructive activities. Formal jobs can bring more people into tax-paying brackets, further contributing to the wider economy of the countries. Many projects hire local individuals, for example to work as rangers to monitor and protect the project area from outsiders. Other jobs include working in tree nurseries and plantations, as ecotourism guides, or controlling forest fires. The types of jobs created and their security, and whether capacity is built to ensure that technical positions can also be filled by local people, are issues that need further consideration in the planning and implementation of REDD+ projects.

^{26.} This activity, i.e. patrolling the area, is especially interesting. The impression it gives is that the community members are hired as guards to protect the area from invaders. It would be interesting to study this issue further to understand if the 'invaders' are, for example, illegal loggers coming from other areas, or people from neighboring communities that have used the area before for harvesting forest products including biomass energy. It is important to understand the potential societal conflicts that this situation might cause between different groups, or even within the same community.

Box 5. Community participation in various REDD+ projects in Indonesia

Indonesia (government-led projects)

The Berau Forest Carbon Program aims to have long-term success in protecting Berau's forests while providing economic development for its people. The Berau Forest Carbon Program will build on site-level experiences, and work with a range of stakeholders to create a more systematic approach across Berau. These efforts will include: (1) establishing governance structures and consultative mechanisms to include communities in overall program decisions; (2) strengthening community institutions to facilitate effective participation; and (3) investing in alternative livelihoods programmes in target areas to support low-carbon development strategies.²⁷

The Tropical Forest Conservation for Reducing Emissions from Deforestation and Forest Degradation and Enhancing Carbon Stocks in Meru Betiri National Park (MBNP) project undertook: (1) awareness-raising programmes; (2) training for community leaders, police and other local government staff on MBNP protection; and (3) a training workshop on carbon accounting for related stakeholders. Effective local community participation in carbon accounting will decrease leakage as well as improve the effectiveness of the MRV system in MBNP.²⁸

Colombia

The Darién project helps to combat global climate change and safeguard the ecosystems and wildlife by strengthening the territorial identity and governance capacity of Cocomasur and demonstrating how forest-dependent communities can generate income from markets of ecosystem services, while preserving their traditional ways of life (Anthrotect, 2011).

Mexico

The forest areas covered by the REDD+ Project for the Community Management of the Territory: The Case of Amanalco Area in Mexico State are within collective property territories, where the community owners use and manage their natural resources. Therefore, to promote an increase in carbon stocks and reduce CO_2 emissions, schemes that involve the different actors (participants) and management need to be developed. Community empowerment and local institutional arrangements are essential conditions for maintaining negotiation capacity and equity in a multiple-interest scenario.²⁹

In Papua New Guinea, the April Salumei Sustainable Forest Management Project claims that it will provide employment opportunities for all members of the community. The Kamula Doso Improved Forest Management Carbon Project in the same country defines technical roles in forest inventory, biodiversity assessment, and monitoring and forest protection that they will seek to fill with recruits from local communities.

The Avoided Deforestation in the Coffee Forest project in El Salvador emphasises the need to assess the impact of the project on local employment opportunities annually. The objective is rightly to avoid making people worse off.

^{27.} Retrieved from http://redd-database.iges.or.jp/redd/download/project?id=15

^{28.} Retrieved from http://redd-database.iges.or.jp/redd/download/

project;jsessionid=F5414B40A100A330B258A615F97995C8?id=86

^{29.} Retrieved from http://www.theredddesk.org/countries/mexico/info/activity/redd_proy...unitarian_management_of_the_territory_the_case_of_amanalco_area_mexico

In Honduras, the Pico Bonito REDD+ project indicates that it is providing hundreds of jobs for the previously impoverished inhabitants of 20 local villages, who are now employed in the company's commercial reforestation and agroforestry activities. This has given them an alternative to their previous reliance on slash-and-burn agriculture and unsustainable wood extraction.

Land users have genuine concerns about the impact of REDD+ on employment and their livelihoods. There is a risk that REDD+ projects, including those run by the private sector, might lead to job losses by restricting current uses and practices without creating alternatives for all.

REDD+ has to demonstrate how jobs can be created from the adoption of sustainable practices including forest management, efficient production of biomass energy, and increased land/agriculture productivity. Producing more from less and adding value will bring the jobs needed to sustain dignified and low-carbon development pathways for forest dependent rural and urban communities. It is important that the private sector and NGOs engaged in REDD+ look at the supply chains of commodities associated with drivers of deforestation and forest degradation and solutions thereof. This might include working with urban communities, for example to address sustainable consumption of biomass energy or value added of timber products.

Projects 'without' communities

Some projects emphasise that there are no communities living inside the project area, but that they are consulting and/or integrating players located in the surrounding areas, designated 'project zones' to differentiate them from the core. Some examples follow:

- In Kenya, the Kasigau Corridor REDD Project states that no one currently lives or has lived in the project area, but 35,000 people live within five kilometres of the project boundary. These communities are involved as rangers monitoring the area, workers at the eco-factory and nursery, and as ecotourism guides. They also receive training on resource management.
- In Indonesia, the Rimba Raya (Infinite Forest) Reserve project stresses the absence of communities or families within the frontiers of the carbon accounting area, except for 14 communities in the project zone. This is based on a survey conducted in 2008. Nonetheless, a series of meetings was conducted through which the project gained local approval. The communities bordering the buffer zone of the carbon accounting area are considered stakeholders in the project development process because of their key role in preventing illegal logging and fires.
- In Belize, the Rio Bravo Climate Action Project indicates that there are no communities living in the project area. However, it also states that communities in the vicinity have been consulted on potential project impacts.
- In Bolivia, the Protection of the Bolivian Amazon Forest project has no target groups, as it covers private property with no communities living in the project area. Project stakeholders are identified as the communities within the project

zone. Reforestation and avoided deforestation activities provide employment opportunities. The project conducted a consultation with the surrounding community members to outline the procedure for complaints and redress in case of the emergence of problems during its implementation.

Claims of 'no people in the forest or project area', or of an area without any communities or other stakeholders with some sort of claim over the resources, need to be looked at carefully. The fact that communities might not currently inhabit an area does not preclude them from claiming access and user rights to the resources. In Indonesia, for instance, traditional use rights have been recently reinstituted following a new Constitutional Court ruling. Customary forests are once again acknowledged after suspension through the state forest legislation of 1967. Sunderlin *et al.* (2014), however, identified Indonesia as one of the countries where tenure insecurity is high, and communities generally have limited power to exclude others from resources perceived as theirs.

In several other contexts, forest-dependent people draw products and services seasonally; therefore, the apparent absence of settlements might be misleading to external interests. The problem is not so much in the short term, but over the medium and long term. Surrounding communities are likely to grow, and other investments may well claim some land and forests. Therefore, the state has to adjudicate forest land for REDD+ taking cognisance of any threats (existing and imminent), particularly those from extra-sectoral drivers of land cover changes. The other question is as REDD+ is aimed at controlling threats, if the forests are not inhabited and there are no economic activities taking place in them, what drivers and underlying causes are being addressed? The absence of communities and other land users also begs the question of whether the project fulfills the additionality criteria. Is REDD+ being used as a conduit for establishing privately owned/controlled/run carbon protected areas?

The four projects listed above were all registered under the Verified Carbon Standard (VCS), which is acknowledged as one of the most robust standards in the carbon market (Peters-Stanley *et al.*, 2012). This standard has a specific tool that provides a step-wise approach to demonstrating and assessing the additionality of agriculture, forests and other land uses (AFOLU) project activities. The VCS tool, for instance, requires project proponents to identify constraints that would prevent the implementation of the proposed project activities. This includes barriers relating to land tenure, ownership, inheritance, and property rights, such as formal and informal tenure systems that increase the risks of fragmentation of land holdings.

However, further review of the project design documents of these four projects indicated that potential long-term land fragmentation is not covered in detail. Further reflection on this aspect is essential to ensure long-term sustainability of these initiatives.

Investing in sustainable land-use practices

Some initiatives are designed to benefit community members to promote their engagement in sustainable management practices. This is the case of the Peruvian Bio-corridor Martin Sagrado REDD+ Project, in which benefits are channelled directly to communities. These include promoting the recognition of local communities' forest management rights, generating carbon revenues that the community will invest in paying people who are employed in forest restoration, improving farming systems, establishing micro-finance organisations capitalising small livelihood enterprises, and maintaining the access and use rights of local communities to continue harvesting NTFPs for local use from the project area forests.

Similar projects can be found in several other countries where REDD+ is building on participatory forest management initiatives involving NGOs as facilitators.

3.4 Key findings of this chapter

Latin America dominates in terms of the number of REDD+ projects in operation, although they cover a smaller area than the projects in Asia. Certainly, past experiences in participatory forest management and implementation of payment for ecosystem services, as well as the tenure regimes, provide an environment that is conducive to private sector REDD+ in Latin America.

The private sector and NGOs are important stakeholders implementing projects, and between them they lead 71 per cent of the 115 projects we analysed. Latin America has the largest percentage of projects with some engagement from the private sector (77 per cent).

The motives behind stakeholder, including the private sector, engagement are expressed as promoting forest conservation, restoration and rehabilitation, providing benefits to communities as well as generating knowledge. Therefore, interventions aimed at addressing deforestation and forest degradation mainly represent traditional integrated conservation and development initiatives. The added benefit being that performance in reducing emissions will be assessed and rewarded. This suggests that past lessons on how to get this approach right need incorporating. The sustainability and successful delivery of REDD+ objectives should rely on the following:

- Ensuring tenure arrangements include local control
- Building stronger local institutions for decision making and upholding rules on the use and management of resources
- Supporting business capacity for implementing sustainable enterprises that are compatible with emissions reduction
- Providing technological know-how
- Access to financing to make meaningful investments, and
- Enabling access to markets for the goods and services generated.

Overall, REDD+ projects contain key elements for the involvement of and benefits to local people. Employment creation, however, goes beyond numbers. The type of contracts offered to local employees (in terms of wages, work conditions and benefits) is also important. In addition, it is important to know such details as whether the costs incurred in training and providing the necessary equipment and inputs for improved land-use practices are going to be charged to the beneficiaries through a reduction of cash benefits.

Regardless of whether the project developer is an NGO or from the private sector, analysis of the 115 initiatives showed that projects make serious efforts to document their engagement with local communities. However, a more robust system to effectively provide information to the myriad actors driving deforestation and forest degradation in landscapes where REDD+ is implemented, and to enable their participation, should be put in place. Additionally, free prior and informed consent should be a sustained process, not just employed at the outset of the project.

Looking deep into demonstration projects: rights and benefits

REDD+ delivery requires fundamental changes in land use and land management policies and practices. At the same time, the potential revenues from REDD+ call for new thinking on the structure of tenure regimes and beneficiaries. Current tenure regimes for land, forests and other natural resources define the rights of access, use and management over tangible resources that generate tangible products and services. Clarifying tenure arrangements for intangible benefits – from ecosystem services, such as regulating the climate or floods, to carbon storage – is fundamental. These arrangements will affect the participation in and benefit sharing from REDD+ initiatives.

UN-REDD and the Forest Carbon Partnership Facility (FCPF) are the two leading institutions supporting readiness processes at the national level as well as informing the international architecture for REDD+. They have developed various instruments and guidelines for conducting consultative processes, ensuring evidence-based strategies and the adoption of safeguards for social justice and environmental sustainability. The *Guidelines on Stakeholder Engagement* (FCPF and UN-REDD, 2012) implicitly acknowledge the importance of obtaining free, prior and informed consent (FPIC) in order to ensure that rights holders among forest-dependent and indigenous people fully participate in decision making about REDD+, whether their rights are based on customary norms or legal provisions. The process should be transparent and incorporate the procedures usually followed by the target groups to make decisions. It is also fundamentally important to provide people with adequate and timely information and give them the opportunity to distil its implications and assess the options.

4.1 Bundling rights: risks and benefits for REDD+

REDD+ provides an opportunity to address the drivers and underlying causes of deforestation and forest degradation. These drivers emanate from the exploitation of natural resources based on rights adjudicated to land users by government or through customary norms. Reducing emissions requires the owners or rights holders to be willing to implement practices that will maintain or enhance the forest cover.

As the list of REDD+ project objectives in Section 3.2 shows, addressing the drivers of deforestation and forest degradation includes the diversification of economic activities. Standing trees from sustainably managed areas generate multiple economic benefits. Securing rights to stored carbon will bring incremental benefits to the resource owners and/or the land users, albeit relatively small ones. It will still be essential to address the larger development and sustainable management challenges to mitigate climate change and generate co-benefits.

REDD+ increases the total value of forests

Trees and forests have historically been valued for the market price of their timber and of a limited number of high value non-timber forest products, such as key components of pharmaceuticals and cosmetics. However, new values may be emerging for forests due to the recognition of the role they play in mitigating effects of climate change (Angelsen *et al.*, 2009). The risk associated with their increasing value is that forest-dependent people may see their land and forest rights threatened as opportunities open up for governments and the private sector. In a review of tenure arrangements in tropical forest countries, Cotula and Mayers (2009) argue that insecure tenure makes people more vulnerable to dispossession as land values increase. Many countries do not yet have the necessary legal provisions and institutions to ensure that REDD+ benefits local people.

Hepburn (2009), discussing the carbon rights in different states of Australia, stresses that

"carbon right is a new and unique form of land interest that confers upon the holder a right to the intangible benefit of carbon sequestration on a piece of forested land. Carbon right holders do not remove any produce from the land, although the stored carbon and potential carbon storage may create exogenous legal and economic benefits in the hands of the interest holder" (p. 239).

Whichever mechanism is used to provide incentives for the reduction of emissions – whether a market mechanism or a hybrid of market and public – the rights holders of the maintained or augmented carbon storage/sequestration capacity need to be defined. This largely remains the case in 2014.

Existing land and forest tenure: paving the way for carbon rights

Different regions have different dominant statutory tenure regimes. In Africa, state ownership is generally prevalent, with the government adjudicating usage rights. In Asia, the picture is mixed with some countries favouring strong state ownership and control, others acknowledging the rights of local communities, and yet others oriented towards private control. While 67 per cent of forest land in Asia is still under government control (Dahal et al., 2011), there is a trend towards privatisation. Individuals and households in China and Vietnam have been granted stronger ownership rights to forests. In other Asian countries, similarly to Africa, the private sector has an advantage in competing with local communities and indigenous people for securing forest tenure rights on land in the public domain. In Latin America, 32 per cent of forest land is privately owned, while local indigenous communities control about 25 per cent and the state 36 per cent (Dahal et al., 2011). According to the preliminary results of a study conducted by the Rights and Resources Initiative on carbon rights (RRI, 2014), only Guatemala and Mexico out of 23 countries studied have legislation defining these rights. The study also indicates that interpretation of existing instruments defining rights of indigenous people and local communities can enable them to transact carbon.

REDD+ implementation requires a strong platform of rights to both tangible and non-tangible resources. The investment in sustainable land use practices requires long-term security of the tangible resources such as land and forests to be maintained by the users. REDD+ projects, similarly to payment for ecosystems services, add value to those resources by acknowledging the value of non-tangible benefits resulting from sustainable land and forest use. Valuing regulating services provides a new impetus to sustainability, but the possibility of capture of this value by powerful economic players at the expense of millions of small land users might jeopardise the potential gains from REDD+.

Rights are tied to benefits and beneficiaries. REDD+ benefits will be generated from the sustainable use of the resources, and accounting systems and price structures need to include a premium for the intangible services above and beyond the products or goods resulting from sustainable use. Carbon credits will be generated from investment in changing land use and practices. Trees stand on land and the carbon in that standing biomass also protects carbon in the soil.

Legislation needs to be aligned with this new challenge. Countries have to clarify rights to both tangible and intangible resources, acknowledging that any investment in the extraction or maintenance of a resource has a potential impact beyond the product itself, as it also affects the storage or emission of carbon. As carbon storage has only recently been acknowledged as a significant environmental service, carbon rights and ownership are far from being formally and explicitly defined even as many countries are submitting their readiness preparation proposals (RPPs) and others are developing their strategies and testing REDD+. Countries are yet to develop national policies or legislation to clarify who owns the carbon, under what conditions such rights can be transferred to third parties, and how to distribute the benefits generated. DRC for example makes a distinction between rights to carbon stored in pools and credits generated from emissionreducing activities/investments. The ownership over carbon as an intangible regulating service stored in various pools is still being debated, but it is clear that ownership of carbon 'credits' as a certified and quantified result of investment and actual implementation of REDD+ activity will be determined by the level of participation of the various claimants in the investment that generated the credits. Therefore, the rights to carbon credits and revenues generated should be determined by the role played and contribution made by the private sector, NGOs and communities towards the generation of the credits. This is a pragmatic approach. However, addressing drivers of deforestation and forest degradation in any given landscape, jurisdiction or project, at the sub-national or national level, will require action by different actors. This means sharing rights and benefits thereafter is a fundamental principle that REDD+ has to embrace, unlike investment in the extraction of provisioning services such as timber and biomass energy.

Equitable access to resources

If REDD+ is to effectively address the drivers of deforestation and forest degradation, then it also needs to address the challenge of equity through legislation that does not push weaker groups further to the periphery. For example, Peskett (2010) states that even where communities are eligible to sell REDD+ carbon credits, the linkage to land and tree ownership may make it difficult to access benefits. Rights to land and trees are generally unclear, segregated or overlapping, making it difficult to demonstrate ownership. Conflicts over land may escalate, especially once REDD+ benefits start to flow, and poorer people might lose out. The landless and women, who traditionally have weaker rights, or are less able to assert their rights may be further marginalised.

However, it is almost a given that the private sector and NGOs only make investments or support local land users in REDD+ when ownership to capital is clear and secure, and this includes having forest land to manage sustainably or land to plant trees to generate carbon credits. Private ownership is seen as giving landowners greater freedom to decide about land use and management, encouraging a commitment to long-term sustainability of land and forests. The desire for quick profits, however, can (and does) still lead to unsustainable use and resource depletion. Some private-sector REDD+ projects are implemented using a 'protected area' concept. Carbon stock hotspots – areas with high carbon stocks and no people, hence no imminent threat – are earmarked for the generation and trading of carbon stocks. Such approaches challenge the basic notion of additionality that underpins REDD+. Conservation NGOs also promote this approach and aim to capitalise on REDD+ for additional funding of protected areas.

Security of tenure need not come from the exclusion of local communities and small and medium businesses, however. If competing claims are ignored, REDD+ can end up licensing the private sector to stringently enforce conservation while possibly hurting livelihoods as well as other economic activities in the project area. Given the long-term duration of projects, it is in everybody's interest to resolve any current and potential conflicts from the start. In fact, what is needed is stronger recognition of community rights to lands and forests. Communities should be granted the opportunity to negotiate those rights with the private sector. The government, together with NGOs, needs to facilitate the process of establishing agreements and monitoring their implementation. Communities should be afforded adequate information, legal protection and assistance, and the right taxation and benefit-sharing legislation should be put in place.

REDD+ should also be used as an opportunity to design more inclusive policies, building on existing legislation to promote inclusivity and benefit sharing. Women and so-called 'internal' migrants can be deliberately and unfairly deprived of essential rights despite being key land users. Current land access regimes based on custom often offer weak tenure. Hence, it is critical to capitalise on REDD+ to reform customs and practices at the local level. National legislatures need to identify the loopholes likely to exacerbate marginalisation and conflicts and develop more innovative land, forest and carbon tenure regimes. These innovations might include acknowledgement of the fact that customary rights are not always inclusive.

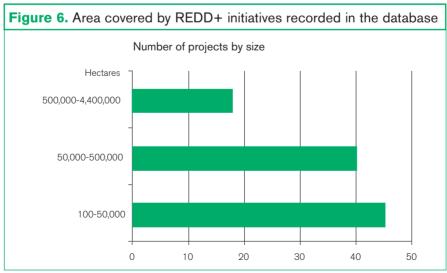
It is important that the premium for regulating ecosystem services is substantial. Otherwise, as Mayers *et al.* (2010) underline, the relatively low price of carbon with respect to timber, and the low share of the benefits going to community farmers (and other land users, including small and medium-sized companies) are likely to act as a disincentive to adopting REDD+ interventions.

Regulations on capping emissions need to be strengthened and enforced in industrial countries and industries in the south, particularly in the emerging economic powers such as Brazil, China and India. In addition, a firmer commitment to compensating countries that have demonstrated good performance towards achieving emission reductions from land use and land use change is paramount to avoid the loss of momentum on REDD+ implementation.

4.2 Land tenure in REDD+ projects

According to the database, REDD+ initiatives cover more than 28.7 million hectares. Of the land under REDD+, 33 per cent is in Africa, 37 per cent in Asia, and 30 per cent in Latin America. Despite having fewer projects than Latin America, Asia has the largest total area of REDD+ initiatives.

The size of the area involved per project varies considerably, ranging from 100 hectares to initiatives covering more than 4 million hectares (Figure 6). About 40 per cent of the initiatives cover areas of up to 50,000 hectares, while nearly 35 per cent control between 50,000 and half a million hectares. It is understandable that REDD+initiatives should be implemented in an area large enough to monitor effectiveness in addressing the drivers, ensure permanence and avoid leakage. Nevertheless, in such large landscapes there are likely to be many land users and many competing rights, and hence many claims over those rights. As indicated in Section 2 and in Figure 6, these multiple interests have to be part of REDD+ solutions.



Source: Based on information from database compiled for this report

The various projects reviewed did not discuss carbon rights in detail. Despite a lack of national policies on carbon rights, one would presume that the mere act of establishing projects to transact carbon as a new commodity implies that tenure rights were clear enough. Detailed analysis of rights discussed in project documents suggest that the carbon rights definition is dominated by the traditional discourse of state-controlled adjudication of use rights over a defined period of time and some level of acknowledgement of community rights. Nhantumbo and Camargo (2014) identified the following group of carbon rights in countries³⁰ that offer some clarity on the issue (at contract level):

- Carbon rights belong to communities: Cameroon, India, Brazil, Colombia and Mexico.
- Carbon rights and other regulating ecosystems services are adjudicated to companies: DRC, Kenya, Zimbabwe, Belize, Paraguay, Peru, Lao PDR and Nepal.
- Carbon rights are vested in the state: Ecuador and Cambodia.

Sunderlin *et al.* (2014) highlight that given the intention of project proponents to control access to local forests in order to ensure carbon additionality and revenue, there is a need to clarify tenure, including who the right holders and potential beneficiaries are and the role in meeting emission reduction targets. This will avoid a potential rush for appropriation of forests due to higher value resulting from the commodification of carbon, as well as protecting current rights and livelihoods. The authors also recommend the implementation of FPIC to ensure that local people take part in decision making about REDD+.

As discussed previously, both the private sector and NGOs supporting communities need clarity of ownership in order to invest. In this case, control over land, trees and forests seems to provide sufficient assertion for projects to take the risk and pursue the commercialisation of carbon credits. The apparent policy vacuum has led both governments and project developers to come up with innovative ways to treat this new commodity and provide some assurance over rights. In fact, the existing legislation is re-interpreted to cater for carbon rights.

a. Africa

In Cameroon, carbon is not expressly mentioned in legislation, but the developers of the Community Payments for Ecosystem Services in the Congo Basin project are interpreting it to be a product of the forest, similar to wood, non-timber forest products, wildlife and fishery resources. Therefore, as local communities hold exclusive rights to the products of community forests, the project developer concluded that the communities responsible for carrying out project activities hold the rights to the protected or enhanced carbon stocks.

In other African countries where the law determines that the state owns all land, water and minerals, the project developer and the state have interpreted this as meaning the state also owns the carbon rights by default. The state then transfers

^{30.} Representing 42 per cent of all countries where REDD+ testing is taking place and documented for the purpose of this research.

carbon rights to the project developer by signing a carbon rights agreement (CRA). DRC is one such case (Box 6). Whether this arrangement will be scaled up to national level policy is subject to the outcome of the ongoing reform of Land Law, which also aims to clarify the relationship between tenure to land and other resources, including forests and carbon stocks.

Box 6. Carbon rights in DRC and excluded groups

Like many of the countries developing REDD+ readiness, DRC does not as yet have specific legislation that acknowledges non-provisioning services, such as carbon storage, and defines their rights and rights holders. Many of the people consulted during the research for this report indicated that *carbon rights* are a new concept – a new commodity that can be bought and sold. Some use the metaphor of forests becoming supermarkets where products and services are extracted and sold. The issue then is who owns these intangible services?

In DRC, the land belongs to the state, as do all other resources and, by extension, carbon. This is the current interpretation expressed through the Carbon Rights Agreement instrument to adjudicate rights to trading carbon by private sector.

Communities and indigenous people have customary rights over land and forests, however. Currently, the prevailing system is coexistence of dual ownership of resources by the state and local communities, but the rights of the state to land and forests supersede those of others. The state can revoke the rights of other actors, including communities, if such a decision is in the wider public interest. A Decree on community forests was approved in 2014, paving the way for greater control and use of forest resources by local communities. Like the state, which exerts power and control over resources and decides priority uses, customary law and tenure is based on power and decisions made by chiefs and heads of families. Access to resources is not equitable even at this level.

One big issue is the protection of internal migrants and women. Population movement is intrinsic to the economic, social, cultural and political dynamics of all societies. The rights of migrants and women need to be made explicit not only for equity but also to prevent leakage. REDD+ can be a catalyst to finding solutions to legal pluralism and contested rights.

The current state ownership of resources is interpreted as limiting the rights of others unless formally adjudicated, in which case payment of royalties is expected. Many agree that the process of adjudicating rights to third parties needs improvement. They add that land-use planning and macro-zoning³¹ should inform the adjudication of land-use rights according to land suitability, hence maximising the benefits not only for the land user but equally for the state.

The DRC example illustrates how one country in which the state owns all resources is allocating land and forests for REDD+. The state holds the right to adjudicate the resources to third parties as defined in the land and forest legislation. One innovation is the fact that forest concessions for logging are being converted into REDD+/conservation concessions. Forest concessions for logging are transformed in REDD+ projects through commitment from the companies to comply with sustainability requirements, that is, implementing management plans that will reduce the level of forest degradation and potential deforestation.

^{31.} To establish permissible land uses and practices that maintain and enhance carbon stocks.

From the interviews in DRC, there was also an indication that the lbi-Bateke project includes a share of 12 per cent of gross revenue with local communities and 50 per cent of net revenue from the sale of carbon credits between the government and the company. The slight variation in provisions between this contract and the one in Mai Ndombe might reflect the fact that this company has long been involved in logging and has migrated from selling timber to carbon credits, or it might reflect experimentation of fiscal obligation to be put in place for REDD+.

In allocating the rights to REDD+ projects through carbon rights agreements, the state also protects the interests of local communities by including provisions for in-kind benefits in the contract. The priorities are defined by the communities through a consultative process and the priorities chosen are social infrastructure for health and education. Lack of both exacerbates rural poverty and these investments, not just in infrastructure but also in staff and equipment, are fundamental to paving the way for people to be lifted out of poverty in the medium and long term.



A school being built – one of the benefits of private sector REDD+ in Mai Ndombe. However, beyond building, schools require equipment and teachers with regular pay in order to transform the communities for whom they were built.

b. Asia

In Asia, most REDD+ projects are implemented on government land adjudicated to third parties in the form of concessions, leaseholds or management contracts, reflecting the dominant forest tenure arrangements. Some are in community areas or in protected areas.

The Cambodian government has issued a Government Decision through its Council of Ministers to endorse REDD+ initiatives. One of the projects is being developed in an area where local communities have been granted land rights (renewable every 15 years),³² Even though the government owns the land, it has recognised the communities' temporary use rights, which also entitles them to carbon credits generated in the area. The government is still involved in the project, as it has agreed to act as the seller of carbon. Households and groups within the community make decisions about land use and land practices to generate the carbon credits that the government will act as a broker for in selling. It is important to know how the government will meet the costs of this facilitation. It may simply want to strengthen political allegiance among the communities, as one of the objectives of the projects mentioned earlier is to promote peace and security as well as preserve national sovereignty.

c. Latin America

In Latin America, the vast majority of REDD+ projects are on land owned by individuals or businesses or controlled by NGOs. Only three out of 61 projects are being managed under government concession regimes in this region. The other two common tenure arrangements are government-protected areas and community/ private lands, in particular the Mexican *ejidos*.³³

Some REDD+ projects involving indigenous peoples are facilitated through legislation to transact carbon credits. In Brazil, for example, the Indigenous Reserves receive special classification under Brazilian law. Property rights are retained by the state, but the right of use extends indefinitely to the indigenous community resident in the area. The Indigenous Bill of 1973 establishes that "[t] he right of use provided to the indigenous communities comprises the right of possession, the use of natural resources existing within the occupied land, as well as the products of economic exploitation of such resources." 34

Costa Rica, on the other hand, has issued a Decree (No. 34761-MINAE of 30 September 2008), in the context of payment for ecosystems services, which authorises a government institution (the Fondo de Financiamiento Forestal, or FONAFIFO)³⁵ to commercialise carbon credits and establish procedures for doing so.

^{32.} Reduced Emissions from Degradation and Deforestation in Community Forests, in Oddar Meanchey.

^{33.} Forest land owned and managed by local communities in Mexico.

^{34.} Article 24 of Law 6001/73 (retrieved from http://www.planalto.gov.br/ccivil_03/leis/16001.htm).
35. FONAFIFO was created by Article 46 of the Forestry Act 7575/1996, as a decentralised entity within the State Forestry Administration authorised to conduct any non-speculative lawful business that is required for the proper administration of its resources including trusts. Its board is made up of three members of the public sector and two members of the private sector. The main objective of this fund is to finance forest management, reforestation activities, afforestation, nurseries, agroforestry systems, recovery of degraded areas and technological change and industrialisation for the use of forest resources for the benefit of small and medium-sized producers. Its objectives are also to attract financing for payment for environmental services for natural forest, forest plantations and other activities that strengthen the national forest sector.

These legal provisions offer some lessons for other regions. The legal arrangement in Brazil, for example, is echoed in many African states, particularly in Mozambique and Tanzania, although the land tenure is adjudicated to local communities rather than indigenous people³⁶ as such. In the case of Mozambique, the legislation provides for the delimitation, demarcation and formal registration of land rights, as well as community consultations in the case of land adjudication to third parties for investments.

Emerging tenure scenarios: implications for benefits

Some national tenure legislation seems to give communities strong enough rights to warrant substantial benefits both from forest products and services. In theory, this means the implementation of REDD+ by external investors would be based on agreements with communities about the 'sharing' of tenure rights. But there are more challenges than the laws imply. Often the state takes the lead in adjudicating rights. Communities can be bypassed or persuaded to agree with investments going ahead even when there is little clarity over the costs and benefits of doing so. This often results in conflicts that can prove costly to the investors as well as to the government and communities. Therefore, it is important to establish procedures for adequate free, prior and informed consent (FPIC). These include the following:

- Detailed and timely information on REDD+ projects must be given: on the costs and benefits, risks and opportunities for local land users, business models, what people are giving up when signing agreements for REDD+, the understanding of boundaries, and the framework for monitoring agreements).
- Respect for local procedures for consensus building, and understanding of the trade-offs of giving or refusing consent.
- The process should avoid coercion, including that based on overstating the potential benefits and underplaying the risks.
- The procedure must take place in advance of decisions being taken, as opposed to situations where communities or local land users are mobilised to endorse a decision already taken.

In DRC and Mozambique, for example, beyond the context of REDD+ the process of negotiation between communities and prospective concessionaires contains the core elements of FPIC. While in Mozambique the consultation process is applicable to all land uses, in DRC it is only applicable to forest concessions. The models, however, are expected to be deployed to other land uses. But the challenge is also the information provided to land users – the quality and detail, and whether it is comprehensible to most of the illiterate rural forest dependent population.

Mayers *et al.* (2013) highlight four useful tools in their guide to land tenure that are key to ensuring delivery of rights to local people: understanding, organising, engaging and ensuring. First, the resource base must be understood. In the case of

^{36.} The concept of indigenous and non-indigenous in Africa is not without contestation. Local communities are generally vulnerable and their land rights threatened. There are minority ethnic groups that still preserve their traditional way of life and are often excluded from the mainstream economic and political realm. However, this does not make them more indigenous that the majority of the population.

REDD+, it is important to quantify the carbon involved and understand what actions and changing land-use practices will enable the generation of emission reductions, and hence the climate and financial benefits. Here the challenge is to translate the intangible, invisible resources so that people can understand their value and the importance of maintaining their existence or even cultivating them.

Second, organising should not be limited to building strong community institutions; it is equally important to have a strong public sector, as well as a private sector that internalises fairness and inclusivity in its dealings.

Third, strengthening of the public sector capacity at all levels to understand REDD+ and the mechanisms for inclusive delivery would contribute to better engagement through the provision of adequate and timely information, as well as appropriate platforms to allow those involved, including local communities, to voice their concerns and perspectives on REDD+. These suggested tools can significantly strengthen the FPIC process, taking it beyond a one-off rubber-stamping exercise to a dynamic process of continuous dialogue.

Finally, the monitoring and evaluating process (ensuring) can be interpreted as creating a mutual understanding of how to register and deal with challenges during implementation and how to capitalise on the milestones achieved in reducing emissions and delivering co-benefits.

Three different scenarios for tenure are likely to shape the formulas used for distributing REDD+ benefits:

- State ownership, defining the nation or state itself as the beneficiary of performance-based payments, as rewards from emission reductions will be channelled at the national level. The state could hold the revenue in a compensation fund, which would have a mechanism for re-distribution. The money could go to those who have contributed to reducing emissions, or be distributed equally to all through centrally defined socioeconomic investments. Several countries are proposing to establish national funds as part of their REDD+ architecture, assuming that the state will be the recipient and hence responsible for (re)distribution. Costa Rica, for example, runs such a government-led fund.
- Business as usual in state-owned forest resources, where the state is the nominal *de jure* owner and adjudicates rights to other land users. Benefits can be returned to society through royalties or the taxation of revenue generated from sales of carbon, or from compensation based on verifiable performance. Generally, the private investor would have security of rights and their obligations would focus on compliance with tax regulations.. Any other direct benefits to local communities may rely on companies' corporate social responsibility. Some countries, such as Cameroon and Mozambique, provide for revenue sharing of royalties from the extraction of timber and other high-value forest products between the state and local communities. This might be extended to areas where carbon credits are generated. In addition, participatory forest management, including community forests, community-based natural

resources management and joint forest management, represents some degree of decentralisation and devolution of management responsibilities to local communities. This approach is one of the first attempts in Asia and Africa in particular to incentivise local communities to reduce deforestation and forest degradation through some degree of ownership of the resources and benefit sharing between communities and the state. The emphasis has been that securing rights will change behaviour and practices, and that supporting alternative income-generating activities would provide the necessary incentive. Payment for ecosystems services prevalent in Latin America's quest to achieve sustainability brought an explicit cash incentive to reward the contribution of land users towards the maintenance and enhancement of ecosystems services. REDD+ builds on these approaches.

 Communities and private sector organisations control forest resources, making decisions about sustainable use, hence reducing emissions. Direct payments might be made based on national performance and the traceability of interventions that contribute to it. A central registrar and transparent system of accounting are needed to ensure benefits go to the right people. Alternatively, direct payments might be made. For example, the Plan Vivo standard involves communities and companies as generators of carbon credits and/or intermediaries between sellers and buyers, and distributes the resulting revenue³⁷ between the participating parties. There are also schemes building on PES and other participatory projects that enable direct transactions between communities/investors and buyers. In Tanzania and Brazil, for example, payments are made to households based on commitments not to deforest. Such projects involve NGOs as intermediaries and the payments come from funds created to support activities and testing of payment mechanisms at this level. In Brazil, the projects facilitated by Amazonas Sustainable Foundation (FAS) in the Amazon include contributions from private sector companies in addition to public sources.

While any one scenario might dominate the policy provisions in a given country, a hybrid policy platform will address the range of different local-level tenure arrangements likely to be found in practice.

4.3 Sharing the benefits of REDD+

The benefits generated from REDD+ should act as the reward for constructing livelihoods and economies on a platform of sustainable land uses, as well as practices that contribute to the mitigation of climate change. If land users are to be part of the solution, projects must clearly define the roles that they can usefully play, measured in terms of effective reduction of emissions as well as the improvement of wellbeing of affected and participating communities.

^{37.} The standard establishes that 60 per cent of revenues generated from selling each tonne of carbon should be paid to the communities. This is a good provision, but its significance to the communities depends on the price of carbon credits and the costs of various actors along the value chain.

Collaborative forest management in Asia offers important lessons for REDD+. Mahanty et al. (2009), indicate that transferring rights of access and management to communities is an important first step for benefits to flow. But they also caution that this does not necessarily guarantee benefit flows to local communities. It is important to establish supportive governance conditions that enable communities to exercise such rights effectively. Such systems should include shouldering the transaction costs associated with strengthening community rights (e.g. paying all levies to guarantee formal recognition of rights).

Many REDD+ projects are still in the establishment phase, with few making payments. As the initiatives are scaled up, analysis will have to include the extent to which the benefits generated are divided among the project developer and the local and national economies. The impact of REDD+ on attempts to alleviate poverty, exclusion and marginalisation from the mainstream economy among local communities, i.e. whether it mitigates or exacerbates them, will be a critical consideration. Safeguards are necessary to avoid negative consequences, but even more so to provide positive incentives.

Among the debates on equity, 38 there are concerns about whether benefits should go to those 'with legal rights' or those 'incurring costs', or to both. Given the insecurity and informality of tenure in many countries, the former is likely to exclude several communities. REDD+ projects should pay more attention to the rights of local communities and indigenous groups or other users that have a record of responsible forest management. This implies that such projects may struggle to achieve legitimacy if disputes (existing or potential) with the diverse actors and other forest users are not resolved. The exclusion of this group from REDD+ benefits could also create a perverse incentive for high-emitting land use practices (Pham et al., 2013). The second option on paying those who incur costs depends on what costs are implied - opportunity costs from changes in land-use practices, or capital investment and transaction costs? The focus on opportunity costs might lead to high reward given to 'bad' land users; while capital investment can be provided to a range of users (the current 'bad', those likely to become and the 'good') in order to promote sustainable and inclusive land uses. Transaction costs are more relevant to intermediaries facilitating the process. As we indicated earlier, both the private sector and NGOs must balance their books.

Categorisation of REDD+ potential benefits (monetary and non-monetary)

There are several levels of benefit sharing to be considered in REDD+. Benefits can be shared between the state and private companies in the form of taxation and royalties. They can also be shared between the management of the company and its shareholders (often external) and between the company and local land users whose access to and use of resources might be affected as a result of the project. Social agreements (adopted in DRC, for example) are one way of clearly establishing what the expectations are from both parties and how to meet them.

^{38.} For example, UNEP (2011), Peskett (2011), a COP 19 event organised by IIED, Oslo REDD+ Exchange, and the Global Landscape Forum at COP 19.

Peskett (2011) provides a useful categorisation of benefits from REDD+ implementation. These include the following:

- Economic benefits such as revenues from carbon trade, increased production and productivity generating surplus for markets, a potential increase in purchasing power resulting from income generated from working with REDD+ projects or receiving cash payments from this, infrastructure development and institutional strengthening of local communities and formal bodies which can be better equipped to manage forests in a sustainable manner. REDD+ can also have wider benefits by mitigating the impacts of floods.
- Social benefits such as strengthening decision-making institutions, increasing requirements and capacity for transparency and accountability, acknowledgement of cultural traditions, and reduced conflicts.
- Environmental benefits such as improved national and global environmental quality.

Diverse benefit-sharing mechanisms

The project database suggests that there are a variety of benefit distribution arrangements between project developers and other stakeholders. However, there are no significant differences across Africa, Asia and Latin America.

In some cases, projects are perceived to be taking place in areas where there are no communities within the project area or in the vicinity, hence there are no beneficiaries. This is the case of the Innoprise-FACE Foundation Rainforest Rehabilitation Project (INFAPRO) in Malaysia that works in restoring the logged-over Dipterocarp forest in Sabah. The company is exclusively entitled to any and all $\rm CO_2$ sequestration and offset in the contract areas. Since 2009, however, 10 per cent of the carbon ownership of all newly rehabilitated areas is shared with Yayasan Sabah, a local institution that controls rainforests. This is similar to a royalty or tax paid by the company for the rights to trade carbon.

Several other projects list numerous benefits that are being or will be allocated to the communities in the project area or wider project zone. The most commonly cited are capacity building and employment opportunities as already discussed, the introduction of sustainable land management practices, improvements in ecosystem services provided by natural forests in the landscape and funds generated through payments for performance. The distribution of benefits equally follows a myriad of arrangements. These include the following:

- Creating a bank account in the name of the community, which requires signatures of several members to liberate resources.
 - An example of this is the Community Payments for Ecosystem Services (PES) in the Congo Basin in Cameroon.
- Setting up a trust fund managed by a board of trustees representing communities, the government and/or project developers.
 - The Kamula Doso Improved Forest Management Carbon Project in Papua New Guinea opted for funds to be managed by an independent financial intermediary on behalf of the asset owners as established in the contract.

- The Madre de Dios Amazon REDD Project in Peru proposes to set up a fund for the promotion of local initiatives through capital investments for the required businesses and services.
- Paying farmers directly upon meeting performance criteria.
 - In the Purus Project in Brazil, "[a]t the end of the fifth year, the community will start to receive payments for ecosystem services as a result of their assistance in achieving the social and environmental goals of the project. The amount of this payment will be linked to the preservation of one hundred hectares of forests within the communities." 39
- Paying farmers indirectly in the form of debt relief.
 - Funds (from the sales of Verified Emissions Reduction, or VERs) from the Avoided Deforestation in the Coffee Forest project in El Salvador will "alleviate debts of users of FICAFE and FINSAGRO, hence reduce their financial obligations, improving their sustainability".⁴⁰ The project highlights that all 19,000 coffee producers who have coffee forest areas are indebted to the Trust for Environmental Conservation of the Coffee Forests (FICAFE) and the National Program for Agrarian Rehabilitation (FINSAGRO). This is commonplace in outgrower schemes where farmers are indebted due to inputs and equipment received.
- Making one lump sum payment instead of continuous payments over the long term.
 - In the Sierra Gorda Wildlands Forever project in Mexico, "[u]nlike payments for environmental services, there is no commitment to the property owners for on-going payments over the long term; rather, with only a lump sum and relatively low maintenance costs, a new nature reserve can be established".

In addition, some projects (such as the Cordillera Azul National Park REDD Project in Peru)⁴² mention that their benefit-sharing scheme is still under construction. The amount of revenue generated from the sale of carbon credits will determine how much can be shared, and the government is expected to establish rules on the distribution of the benefits.

What benefits are being paid?

Of the 115 projects, only 23 per cent explicitly state that communities are likely to receive a cash share of the carbon credits. About 16 per cent of the projects provide some information on the share of the benefits that will be allocated to the different players. Table 1 shows other examples of how benefits are shared, including projects managed only by communities with a standard (e.g. in Mexico) and varying degrees of state and community benefits in other cases. This reflects different models being adopted in projects 'with' and 'without' communities, and those led by partnerships or by communities. Less than half of these projects have the private sector as the main

^{39.} www.climate-standards.org/2012/10/20/the-purus-project-a-tropical-forest-conservation-project-in-acre-brazil

^{40.} www.climate-standards.org/2008/10/22/avoided-deforestation-in-the-coffee-forest-in-el-salvador

^{41.} www.climate-standards.org/2010/12/07/carbon-sequestration-in-communities-of-extreme-poverty-in-the-sierra-gorda-of-mexico/

^{42.} Even though the project provides a list of preferential beneficiaries, it states that the amounts allocated to each are confidential.

project developer, with most developers coming from NGOs. Project developers always list several benefits in statements, such as "[c]arbon financing will be used to support rural communities to develop a range of livelihood activities including non-timber forest products (NTFP), improved agroforestry activities and agriculture intensification, community-based ecotourism infrastructure, micro-credit and communication walkways development as well as other economic, social, cultural and environmental activities".⁴³

A number of projects highlight that their revenues will contribute to improving community land stewardship and governance and support sustainable livelihood practices, leading to improved household welfare. However, very little information is provided about the amount of the carbon sales that will benefit the communities.

- 1. The Makira Forest Protected Area Project in Madagascar indicates that the revenues from carbon sales will be used to finance the long-term conservation of the forests, improve community land stewardship and governance, and support sustainable livelihood practices leading to improved household welfare.
- 2. The Kasigau Corridor REDD Project in Kenya states that the land and carbon are under the proprietorship of the company managing it, and there are no communities living in the area. This company has implemented a wide range of sustainable development initiatives in Rukinga over the past ten years, and is committed to continuing with a new range of innovative co-benefits for the communities that are in the project zone once the funding for the carbon project begins.⁴⁴ The company provided additional information indicating support to communities through a bursary scheme for the education of children, promotion of organic farming and processing of oil extracts (Nhantumbo and Camargo, 2013).
- 3. The Reducing Carbon emissions from Deforestation in the Ulu Mansen Ecosystem project in Indonesia aimed to establish carbon finance funds to offset all or most of the opportunity costs of avoiding deforestation, as well as to support project activities and operations. A substantial portion of the carbon finance was to be deposited into these funds and directly benefit local communities and forest guardians. By preventing deforestation, the project will help Aceh achieve a sustainable future that also preserves critical and highly threatened habitats for biodiversity and develop a sustainable community model for the use and conservation of forests. However, recent regional and provincial spatial plans aiming to allow logging, mining and plantations are likely to undermine these intensions.

A Kenyan project aiming to protect and rehabilitate mangrove ecosystems offers an example of a project involving several bodies working in partnership: research and training institutions, the private sector, local communities and government institutions. This project follows the Plan Vivo standard. No explicit percentage of funds goes to the government, 67 per cent (Table 1) of the income goes to meeting the various costs of running the project, and the remainder is invested in alternative income-generating activities chosen by the community.

^{43.} Relating to the Yurilamas REDD Project in Peru.

^{44.} www.climate-standards.org/2010/12/07/carbon-sequestration-in-communities-of-extreme-poverty-in-the-sierra-gorda-of-mexico/

Table 1. Examples of benefit-sharing schemes: an array of formulas used							
Country	Project	Location	Target group	Benefit sharing system			
Kenya	Mikoko Pamoja	Gazi Bay, situated on the south coast of Kenya, some 50km from Mombasa, in the Msambweni District of Kwale County.	Local communities adjacent to the Gazi Bay mangrove areas in Gazi and Makongeni villages.	• 62 per cent to support the running costs of the project, including paying the salaries for project coordination and local labourers engaged in mangrove patrolling, establishing nurseries and planting, hence supporting the local economy. • 5 per cent on other office expenses. • 33 per cent will be spent on community projects determined through an annual prioritisation process.			
Madagascar	Makira Forest Protected Area Project	The Makira forests in northeastern Madagascar, 40km west of the town of Maroantsetra. Falls within three regions (Analanjirofo, Sava and Sofia) and five districts (Maroantsetra, Antalaha, Andapa, Befandriana Nord and Mandritsara).	21 communes and 63 Fokontany. ⁴⁵	 (up to) 2.5 per cent of revenues from sales of carbon credits for third party monitoring and verification. (up to) 2.5 per cent to support carbon revenue management through a designated national foundation.⁴⁶ (up to) 5 per cent to support marketing and sales of carbon credits. 50 per cent to local communities in and around Makira to support natural resource management, forest conservation and community development initiatives (activities to support reduced deforestation). 25 per cent allocated to the manager of the Makira protected area. 15 per cent to the national government to strengthen technical capacity. 			
Indonesia	Marubeni Proposed REDD+ Project	Kotawaringin Timur District (82,217ha) and Katingan District (145,043ha), Kalimantan, Indonesia.	34 villages around the project site.	 Government: 20 per cent. Community: 20 per cent. Project proponent: 60 per cent.⁴⁷ 			

Malaysia	INFAPRO Rehabilitation of logged- over dipterocarp forest in Sabah	Malaysian state of Sabah on the island of Borneo, about 71km from the town of Lahad Datu.	N/A No such communities in the project area and its surroundings.	The company is exclusively entitled to any and all CO ₂ sequestration and offset in the contract areas. Since 2009, 10 per cent of the carbon ownership of all newly rehabilitated areas is shared with a local institution. Note that there are no communities within the project area.
Mexico	Much Kanan Kaax	Southeast of the Yucatan Peninsula, in the area commonly referred to as the 'Mayan Jungle'. In its initial phase, the project is located within the limits of the Ejido Felipe Carrillo Puerto.	1. The pilot ejido Felipe Carrillo Puerto covers an area of more than 48,000 hectares and has 240 ejidatarios.	• 60 per cent of the carbon credits revenue will go directly to the local community. • 33 per cent will be used to maintain the organisational structure, helping to manage the project, and for technical assistance. • 5 per cent will be used as a savings fund in order to invest in other complementary community projects in the area (this portion will also be used as insurance in case of the risks linked to the project). • The final 2 per cent will be used to cover additional fees, such as the US\$0.35 that has to be paid to Plan Vivo Foundation for each tonne of CO ₂ sold.

^{45.} Urban village clusters.

^{46. &}quot;In June 2008, the Government of Madagascar and Makira Carbon Company LLC developed an agreement outlining the carbon revenue sharing and management mechanism for the Makira Project. A foundation or similar entity designated by the state will be in charge of the management and disbursement of funds made available under the agreement. Fund management for the 50 per cent of net revenue designated for local communities will be determined by a steering committee within the designated foundation in collaboration and consultation of the manager of Makira Protected forests. The net proceeds for the sales of Makira emissions offsets will be allocated." (Project Design Document, October 2011 draft, pp. 72-73).

^{47.} These are the figures described in Decree of the Minister of Forestry P.36/2009 for IUPHHK-RE. They will be applied for the full-scale activity from FY2012.

In Madagascar, one partnership between the government, an NGO and the private sector will pay 15 per cent of carbon revenue to the state and 50 per cent to communities; the rest will finance management. There is no explicit indication of benefits to private investors. In Indonesia, one partnership project grants government and communities equal shares totalling 40 per cent, with companies taking the rest. Communities in Mexico pay two per cent to Plan Vivo, corresponding to US\$0.35 for each tonne of carbon credits sold; the rest goes to meeting the various costs (direct payments, management and savings).

In Malaysia, one company is claiming full ownership of carbon credits and revenues because (allegedly) there are no communities in the project area; a local institution receives 10 per cent of the benefits.

Legislation on benefit sharing still scanty

Few projects refer to some type of national/regional legal framework that determines how benefits from carbon revenues should be distributed. One exception is the Cambodian project Reduced Emissions from Degradation and Deforestation in Community Forests – Oddar Meanchey. A Cambodian Government Decision (GD, 699) establishes that a minimum of 50 per cent of net income should be paid to local communities.

In DRC, CRAs establish that 50 per cent of net revenues from carbon sales will be shared with the government in addition to the social agreement through the establishment of social infrastructure and other benefits to local communities. The formulation of the contract borrows from the existing forest regulation for logging, with some innovations in setting up benefit sharing, which are not yet legislated.

Box 7 describes in detail the activities and obligations that one company has to fulfil in order to trade carbon based on an interview with the manager. It is clear that DRC is indeed taking some bold decisions to enable implementation of REDD+ with involvement of the private sector. The provisions raise tax revenues for the country, but also cater for community benefits. Investment in improving the livelihoods of local communities through more productive agriculture and fishing practices, as well as efficient harvesting and use of biomass energy, are fundamental to addressing the drivers of deforestation and forest degradation. In addition, such interventions are essential to providing sustainable livelihoods that can impact on people's wellbeing in the long run. Ensuring that benefits are accessible to the affected population is also key to limiting potential leakage.

Box 7. Private sector REDD+ in Mai Ndombe⁴⁸ project, DRC

The company's negotiations with the government date back to 2009. In 2011, a CRA was signed with the government transferring the right to sell carbon credits to the private developer. The project area covers 299,645 hectares. There is an agreed core area of protected primary forest and a buffer zone of between 400 metres and 1 kilometre. The goal of the 25-year contract is to ensure the initiatives benefit the government, communities and the private company. Land-use planning with local communities is part of the agreement, to ensure sustainability contributes to generating carbon credits. Carbon monitoring applies the VCS, combined with CCBA for social aspects. The estimated average reduced emission of CO_2 is 5.8 million tonnes per year. The deforestation model is based on historical cumulative rates of land cover change registered during the 23 years of logging activities. The agreement provides for the definition of carbon rights and benefit sharing. The concession contract outlines how corporate social reasonability should be implemented, including the location of social infrastructure. FPIC was demonstrated through signed copies of consent written in local languages. The company has operational costs of US\$2.5 million per year and has spent US\$4.5 million since its establishment.

Tax revenue for the state

- Annual area-based tax of US\$0.50 per hectare to be paid annually to government for the duration of the project.
- 50 per cent of the net revenues from the sale of carbon credits are to be paid to government.⁴⁹
- Percentages to be charged on overheads varying from 10 to 25 per cent, depending on whether the costs are more or less than US\$100,000, with the maximum royalty paid for those below US\$50,000.

Community benefits

- There are 26 communities in the project area, totalling about 50,000 people.
- Communities are to be paid US\$0.50 per tonne of avoided emissions for the first three years of the project and thereafter US\$1.50/tonne to the end of the project.
- Payments have to be in-kind investment in social infrastructure prioritised through community discussion.
- The agreement stipulates that communities will receive benefits from the beginning of the project, including two schools, a mobile clinic and the introduction of agroforestry systems to increase agricultural productivity and diversify household and community livelihoods. Communities discuss priority investments, for example in more productive, efficient and sustainable practices of agriculture and fisheries.
- The company has hired nine agronomists to help communities address the drivers of deforestation and forest degradation. For example, cassava production is a major driver of forest cover loss as high yields are only obtained for a short period, hence the need to clear new land. The price of cassava and beans in urban areas such as Kinshasa provides enough incentive for production. Biomass energy production to meet urban demand is also

48. In Mai Ndombe there is also a larger (12 million hectares) integrated REDD+ readiness project run by WWF in collaboration with the government and other civil society organizations (WWF, 2012).

49. Some contradictory information was received about whether or not 50 per cent (from the contract with ERA) of net revenue from carbon credits would be payable to the government. Some government officials indicated that "it is not conceivable that an investor can share equally its revenues with government". In the view of these sources private companies incur various costs including taxes, investment in activities such as development of management plans, undertaking monitoring, signing social agreements (SAs) with local communities and following the FPIC process. However, the author verified that the contract clearly states 50 per cent tax on income from carbon credits. This demonstrates that this arrangement is still ad hoc and does represent a government policy on the fiscal obligations of companies implementing REDD+ projects. Clear legislation is urgently needed to establish those requirements and facilitate their enforcement at national and local levels.

another driver. Overfishing with small nets trawling for 2 kilometres has reduced stocks in the lake, yet local people attribute the responsibility for this to spirits and their ancestors. Local extension officers were hired to build capacity in more productive and sustainable techniques such as:

- The introduction of more productive farming systems including high-value crops such as vegetables and beans, which will also improve food security
- Aquaculture (artificial insemination and changes in fishing techniques) in Lake Mai
 Ndombe, and
- Improved methods of charcoal production.
- Producers are helped to access markets through bundling their produce and collective transportation to markets such as Kinshasa.
- Payments to communities are based on the Congolese Forest Code, which states that benefits should be collective and not individual payments. As a result, villages request schools and clinics, reflecting the major areas of shortage of social services. The plan is to construct schools for each of the villages.
- The company indicated that they also pay the teachers. Most parents are so poor that they are unable to contribute 50 cents or one dollar a month.
- While the services, including seeds, are funded by the company, the building of schools is in effect an advance payment to communities, as the corresponding cost is deducted from the carbon credit payments due to them.

A current challenge is the absence of a strong and predictable carbon credits market. Despite having an agreement with a German company to purchase some of the credits, expanding the portfolio of buyers and having long-term contracts is fundamental. Can the government play a role in selling credits? Is a bill in the United States making it obligatory to offset emissions going to create demand?

Source: interview with the manager⁵⁰

According to various interviewees, conducting a transparent process should start with providing information about the business. This is necessary to build a full understanding of the project and its impact on people and on access and use rights of the local communities. They stress that SAs should be developed as a result of adequate consultation and negotiations to ensure that their conditions, rights and obligations are fully understood. Some claim that the process could be strengthened not only by getting leaders to sign the consent letters, but also by ensuring that local-level government and the community at large also took part. This could pave the way for reducing future conflicts, notwithstanding the fact that the government acknowledges the challenge and costs of conducting a thorough process in an uncertain environment with regards to carbon markets and fund-based mechanisms that are still under development.

Besides following national legislation, seeking third-party validation places demands on companies to ensure social equity as well as environmental and carbon credit sustainability measures.

^{50.} This information was gathered through interviews between the authors and project stakeholders in DRC. The interviews provided insight and allowed the authors to collect information and clarify issues on benefit sharing, which were not covered in such detail in the PDD.

Transparency: rights and obligations in the REDD+ contracts

Only a handful of projects mention the general terms of the agreements;⁵¹ we had access to only three such contracts available in the public domain (from India, Malawi and Tanzania) out of 115 detailed contract/agreements.⁵² A fourth contract was obtained during the visit to DRC in the context of this study, as well as signed consent agreements from communities acquiescent of the project. This transparency is commendable as it provides an opportunity to understand the content and commitments between governments, communities and private sector actors.

The contract from India (relating to the Umiam Watershed REDD+ Project) highlights the commitment from communities to improving land/forest management practices. The Malawi Forest Conservation in Nyika National Parks project also provides detailed activities and targets for various management and non-timber forest-based enterprises to be undertaken by local communities, but apart from the implicit potential benefits of these activities, there is no mention of accounting and distribution for carbon benefits. The Yaeda Valley REDD project affirms that as well as the environmental and economic benefits from its income-generating activities, there will be PES from carbon credits. No percentages or amounts are indicated, although monitoring of carbon benefits is also mentioned in the contract. In this project, besides agreement with whole villages, there are specific agreements with producers, that is, land users who agreed to undertake land use changes that will contribute to reducing deforestation and forest degradation, thus generating carbon credits and income.

Greater availability of these formal agreements would have enhanced the understanding of the relationships between project developers and governments, as well as affected communities.

The tax rates paid by REDD+ projects vary considerably, reflecting the interpretation of the project objectives, the leading institution and the subsequent categorisation of projects as either for-profit or contributing to conservation and development. At one extreme, REDD+ interventions have needed support from government and incentives for local communities to take part (e.g. in Kenya and Mexico). At the other end of the scale, REDD+ projects are seen as classic business opportunities that should contribute to raising tax revenues for the country (e.g. in Indonesia, DRC and Madagascar) while providing benefits to local communities. Implicit in the forms of taxation shown in Table 1 is also the fact that private sector investors receive a sizeable share of benefits.

^{51.} For example: the Purus Project, a tropical forest conservation project in Acre, Brazil; the Paraguay Forest Conservation Project for the reduction of GHG emissions from deforestation and forest degradation in the Chaco-Pantanal ecosystem (a 20-year contract with payment schedule split between SPO/WLT/Guyra Paraguay, and legal binding easements on land title-securing interests of the Yshir community in perpetuity); and the Mai Ndombe REDD+ project in DRC (a "Social Chapter" was signed with the communities prior to the start of the project describing investments and activities that will be undertaken by the project throughout its duration, outlining how the revenue generated is to be provided to the local communities and managed, and setting out how decisions related to direction and execution of project activities are to be determined).

52. Malawi: Forest Conservation in Nyika National Park and Mkuwazi Forest Reserve; Tanzania: REDD in the Yeada valley, Northern Tanzania; India: Umiam Sub-watershed REDD+ Project.

It is not about one size fits all

The tax structure and sharing of benefits from the extraction of tangible products varies according to national legislation, tenure arrangements and development priorities; REDD+ implementation is embedded within these contexts. The main lesson for countries is not about applying the same tax as others. Rather, they need to define the appropriate level of taxation to provide incentives for land users (local communities and other local enterprises) to change practices in order to reduce emissions. It is also important to clarify the role and benefits of any intermediaries, including from the private sector, and how the state can undertake its mandate of ensuring that ecosystems services benefit the economy more widely through tax revenues.

During a project's life, it is important that it responds to changing community priorities, reflecting their level of wellbeing and evolving as basic infrastructure needs are satisfied. For example, some REDD+ projects in Brazil (such as the project implemented by FAS in Amazonas) combine investment in public goods, such as clinics and training centres, with investment in alternative incomegenerating activities and individual household payments. The Tanzania Forest Conservation Group (TFCG) in Kiloza and Lindi primarily provides cash incentives to individuals within each household based on a commitment to use land according to the participatory land use plan designed by the villagers. There is no one single solution for REDD+ that can be implemented across all countries, but just as countries should be compensated for demonstrating effective policies, practices and performance in reducing emissions, so should individual land users who will ultimately make the changes in land use practices. The urgency for social infrastructure will reduce over time, needs and preferences are likely to change. It is therefore important to consider in the early stages of testing REDD+ how compensation can also evolve into individual cash payments to those who make land use changes. It is individual responsibility that will enable communities not to default.

4.4 Key findings of this chapter

There is enormous variation in the land size of the projects, and some projects are extremely large (0.5 to 4.4 million hectares). Nevertheless, the fact that nearly 29 million hectares fall under REDD+, together with the long-term duration of the projects (spanning more than 100 years in some cases), underscores the fact that getting the rights 'right' is fundamental to ensuring permanence of interventions, avoiding land use conflicts in the medium and long run, and ensuring equity. In large landscapes there are likely to be competing interests and current and future claims. Identifying the actors, interests and claims should not be postponed in order to get quick and cheap deals.

55

REDD+ demonstration projects: building on existing experience or thinking out of the box?

5.1 Participatory forest management: where it fell short and where REDD+ adds value

Governments in Africa, Asia and Latin America have long been grappling with the issue of regulating the sustainable use of natural resources, ensuring they contribute to national economies as well as addressing poverty.

Legislation governing forest management has evolved to acknowledge that the participation of local stakeholders in particular communities is key to more sustainable use of resources. Devolving resources alongside the introduction of participatory natural resources management was seen as a step in the right direction, particularly as it could help address unsustainable agriculture practices such as increasing production based on the expansion of land and the use of fire and biomass energy, which is a particular problem in Africa and, to some extent, Asia.

In the past, the opportunity to improve management and the wellbeing of people was enormous, but governments lacked adequate resources to deploy the necessary technical support. There were insufficient resources to meet the transaction and implementation costs or to compensate for non-tangible and non-provisioning services. The emphasis was on harvesting non-timber forest products and some level of processing and commercialisation. In some cases this failed to compensate for more lucrative but destructive activities, such as charcoal production. This posed challenges to sustainability, especially in a context of short-term (often less than five years) external facilitation by government and NGOs. The combination of these factors limited the impact of an otherwise promising approach.

Getting governance right

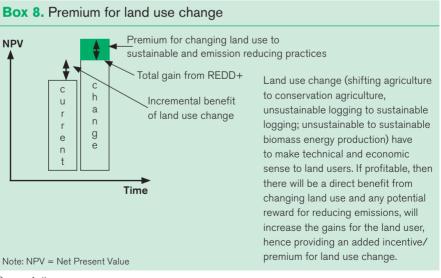
As Mahanty et al. (2009) note, participatory forest management still suffers from governance challenges such as elite capture associated with limited transparency, poor accountability, weak participation of communities in decision making and a lack of systematic monitoring. Benefit-sharing mechanisms and the extent to which they can promote equity in the target communities are still a challenge for this approach and for its potential use in REDD+ delivery. This coupled with strong facilitation such as that conducted by institutions like the Namibia Community Based Tourism Assistance Trust (NACOBTA) is critical. In addition establishing supporting institutional arrangements and long-term commitment from funding agencies is paramount to sustaining gradual and steady transformative change in behaviour and land use practices. Bond et al. (2009) indicate that state facilitation, reduced elite capture and adequate levels of benefits provide the necessary combined incentives for conservation.

Turning the opportunity cost on its head

Paying a premium on sustainability to communities or land users is crucial to delivering the expected long-term benefits of this approach. The higher benefits generated using the same approach in wildlife-rich areas (such as those designated in the CAMPFIRE initiatives, the controlled hunting areas in Botswana and conservancies in Namibia) in East Africa and Southern Africa, though involving a higher market value of resources than forest products, have demonstrated that distributing benefits can result in both conservation and improved livelihoods. The relatively low value of forest products involved in much community-based natural resources management, however, may not yield significant benefits to local communities. Therefore, REDD+ is likely to represent a premium (Box 8) that could promote sustainability not only as a cost that communities have to bear, but as a benefit that can be derived.

While participatory forest management (PFM) in its various forms – community forestry, co-management – rightly focused on ensuring resource tenure, alternative income-generating activities introduced also needed to be lucrative. For example, a sustainable and efficient charcoal business needed (and needs) to be a more lucrative business than the unsustainable and low-efficiency conversion of wood to charcoal.

The challenge for REDD+ therefore becomes less about the opportunity cost of land use change as measured by carbon credits against the profitable price of commodities, but rather in finding land use practices that are technically sound (i.e. that increase productivity and efficiency of resource use) and financially viable. This is where participatory forest management often fell short, and what REDD+ can capitalise on.



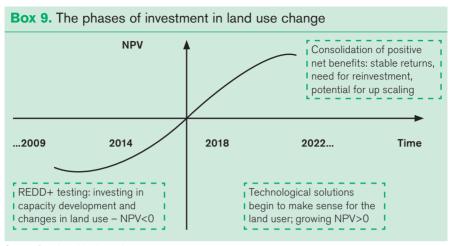
Source: Authors

A business approach is necessary: assets, institutions, markets and duration of investment

In participatory forest management, the potential success of these initiatives was also limited by a lack of focus on business approaches, including devolving high-value forest resources and providing business capacity, and facilitating access to adequate financial capital and technologies as well as strong organisations. Macqueen (2013) see these elements as key pillars for ensuring that local control over productive resources can yield the transformation of forest-dependent communities into successful entrepreneurs. The existence of such enterprises could pave the way for building private-private partnerships in REDD+ delivery at the local level. The projects discussed in this report could build on a much stronger platform.

Key lessons from participatory approaches are also captured in the 'improved African hut' framework and the business case for sustainable management of natural resources (UNDP, 2009). The 'roof' of the hut is sustainably managed resources and improved wellbeing of the people. The key 'foundations' relate to capacity, including education of the target population, information on rights, obligations, better land use options and health of the population that will determine the extent of and the role played in changing land use practices. The 'pillars' include clear and strong rights to enable land users to invest in long term sustainability; institutions, which includes rules, accountability and the organisation of land users into enterprise groups to enable production at scale, value addition and access to niche markets; access to technologies to enable increased productivity, efficiency in harvesting and value addition; access to finance in the form of credit and other types of investments that enable the land user to invest in changing land use practices; and access to reliable and fair markets for the goods and services that are sustainably produced. It is the combination of actions to create enabling conditions (the foundations and pillars) that will determine the achievement of REDD+ goals (the roof in this analogy): emissions reduction and delivery on co-benefits that include poverty alleviation and biodiversity conservation.

Additionally, land use change needs to be treated as a business with three fundamental phases (Box 7): an investment phase (including capacity development, establishing rights and investing in sustainable enterprises) with net negative gains; a growth phase with a gradual increase in net revenues allowing the payment of the investment; and a consolidation phase when the business is stable and profits can be reinvested to sustain the business.



Source: Developed by the authors

A cost-benefit analysis of many private sector investments often requires the investments to span a few years or even decades. This is the reason for the long-term contracts under REDD+ led by the private sector and NGOs; the projects analysed are likely to last for up to 110 years. Yet, the paradox is that community-implemented activities are expected to meet the goals (changing behaviour towards sustainable practices and improving livelihoods) in the short term (generally three years, five at best). This sets initiatives up to fail, and indeed many have failed this unfair test. Multilateral and bilateral agencies supporting REDD+, private capital investors and project developers (private companies and NGOs) need to take a long-term approach to changing practices and behaviour.

Whether led by the private sector or an NGO, REDD+ needs to build on these lessons.

- A premium for the regulating services resulting from sustainable land uses
 provides the added incentive for long-term change in behaviour and practices.
 REDD+ offers such an incentive, and is thus a necessary complement to
 participatory forest management approaches. REDD+ has not reinvented the
 wheel, but rather is building on approaches that have already been tested.
- Investing in more productive and efficient land uses requires access to markets that will pay for the sustainably produced goods and services. REDD+ interventions should therefore not overlook the market for both tangible and intangible goods and services.
- 3. Change in behaviour is gradual and requires long-term commitment from all parties.

5.2 Payment for ecosystems services: right policies and incentives

Payment for ecosystems services (PES) offers another important element: compensating the individuals who adopt sustainable land use practices. This is an important lesson for the use of community-based natural resource management (CBNRM) in the context of REDD+. It also offers lessons for establishing the entities (collective or individuals) that can transact and claim performance-based payments based on the impact of their activities on reducing emissions. Private sector- and NGO-led REDD+ could then be extended to small-scale farmers, who are numerous enough to have a positive impact in reducing emissions.

The Costa Rica PES programme, for example, has succeeded in changing behaviour through a mix of instruments and the involvement of different actors. These actors include a government that set itself the vision of becoming carbon neutral by 2021, legislated for PES, and established an institution to manage and facilitate the process. The government also enabled the private sector to change land use practices and play an important role in contributing to the national fund through taxation and, more recently, creating internal demand for credits. Porras (2013) stresses that a combination of instruments has helped deliver the positive results in Costa Rica. These instruments include stricter policies and laws on deforestation, zoning and conservation in protected areas, innovative financing mechanisms, technological experiments, and capacity building. As a result, around 13,000 landholders participate in the scheme, which covers almost 800,000 hectares of forest and distributes almost US\$280 million.

There have also been some improved forest management interventions in which the regulating ecosystem services (flood control, climate regulation) and support ecosystem services (nutrient cycle) are acknowledged, accounted for and bundled together with provisioning (food, timber, fuel) services, which normally get a market price. Such bundling offers added benefits, premium or compensation for regulation, and also provides cultural services such as sacred forests.

As with REDD+, communities and landholders need to have secure tenure over resources and be able to demonstrate the changes in land uses that will supply the ecosystem services that the buyers are paying for. The level of compensation depends on conditionality and compliance with contracts. Costa Rica and Mexico have established mechanisms to generate internal funds (through taxation) to finance the initiatives. This is critical for REDD+, as markets, and even fund-based financing from developed countries alone, are unlikely to meet the regular and long-term payments needed to effectively mitigate climate change and improve livelihoods.

^{53.} The payments vary according to land use – the programme pays US\$64 per hectare per year for protection and regeneration, U\$50 for management, and US\$196 for reforestation activities. Economic and environmental priority criteria are used to allocate contracts, for example the extent to which the forest in question is a biological corridor or is home to native species, and if it is in an area that protects water sources (Porras, 2013).

5.3 Forest categories, carbon taxation and benefit sharing The current situation

Governments have devised various policies for promoting sustainable management of forests for timber production. Cameroon and Mozambique approved legislation whereby the government shares 10 per cent and 20 per cent of royalties with local communities, respectively. Cameroon also explicitly channels 40 per cent of the revenues from royalties to local administrations (Aronsen and Lindhjem, 2010, while Mozambique allocates 80 per cent of the revenues from royalties to the Agrarian Development Fund, which then apportions this to various investments, not just (and often not to) forestry-related ones. The benefits accrued by communities are intrinsically linked to the value of the forest being harvested, determined by species, value of the species in the domestic and international markets, use and volume. In some cases the royalties do result in positive impacts as they fund services such as education, water and health in areas where government has not been capable of offering such services. Nonetheless, as Costenbader (2011) points out, there is only limited community participation in the management of forests destined for high-value timber production, hence the meagre benefits.

Forest categorisation is currently determined or influenced by its composition and final use. Forest royalties are differentiated according to tree species and market value. National inventories often classify forests types according to the dominant tree species, associated ecosystems and their value (both commercial and environmental), biodiversity and watershed protection. This determines the general classification of forests into production forests, protected forests and forests that are 'convertible' to other uses ('multipurpose forests'). Production forests are typically allocated to large-scale forest concessions and other high-value timber harvesting regimes.

Classifying forests based on carbon stocks and threats: is it conceivable?

Understanding carbon stock classes and/or carbon emissions threat categories can help gauge the potential emissions reduction impact, the actors that need to be involved, and the benefit-sharing mechanisms. Such a classification may also highlight other forests under threat of conversion for agriculture, settlements and infrastructure. One can argue that given the multiple competing uses and users in these areas, a higher premium should be paid for management practices that maintain the stocks in natural forests or enhance carbon stocks through plantation and the restoration of degraded areas.

The reference levels and monitoring, reporting and verification systems will certainly lead to the mapping of different classes of forest carbon stocks, and assigning categories based on threats and the associated value could contribute to evidence-based taxation and benefit-sharing systems. Carbon value could be determined by the level of threat of conversion or degradation of the forests. This suggests a premium on carbon that is inversely proportional to the threat. Current requirements for the sustainable management of forests based on harvesting an annual allowable cut in a unit area could possibly be extended to carbon stocks. Threats are likely to

be dynamic. For example, population increase, middle-class growth, conservation patterns, the behaviour of international markets for forest products, and awareness of consumers about climate change are all likely to determine the level of demand.

Management of forests for timber and for carbon stocks will certainly require a significant investment in drawing up and complying with management plans. Only increased capacity for monitoring and private sector commitment to contributing to the mitigation of impacts of climate change can ensure effective reduction of emissions. Policing by governments will be limited, given the magnitude of the economic activities that need to comply with sustainability.

Internalising avoided emissions along the value chain

While royalties should be paid for the extraction of timber, doing so in a manner that reduces the losses of carbon could reap benefits from 'selling' avoided losses of carbon stocks or reduced emissions from the value chain. The selling could be nominal, carbon 'insetting' or reduced emissions within the supply chain. It could be included in accounting procedures for logging companies that they must demonstrate how they 'inset' or reduce emissions in the value chain starting from their activities and any surplus could potentially be bundled with the price of timber and traded. The market needs to be able to pay for this. Driving demand through legislation is necessary. Instruments like FLEGT and EU regulations on goods and services brought to its borders are a step in the right direction, but commitments need to be global and the BRICS in particular have a significant role to play.

The forest concession model for benefit sharing might be adapted to REDD+ requirements to ensure efficiency in reducing emissions, cost-effectiveness and delivery of equitable co-benefits. Modifications might include mapping of carbon stocks to differentiate sources at the national level and making the premium on carbon proportionate to the threat on the one hand, but also rewarding the maintenance of stocks through sustainable use on the other. There will be a fine balance between the two. For example, REDD+ interventions in Amazonia include supporting the development and strengthening of local institutions, supporting income-generating activities as alternatives to felling trees, as well as direct payments to households via the women in families, which reflect the REDD+ vision. As indicated in the previous section, it is fundamental that alternatives (more productive, more efficient use of resources and sustainable practices) are financially viable and long-term enterprises. The consequence of not taking this into account will be further loss of resources for readiness without effecting the transformation of behaviour and practices. Payment to the men in families is likely to have a lesser impact on addressing drivers related to production for food security. Such models, nevertheless, should not be blindly applied across countries; local context should inform the choice of national-level contextdifferentiated payment models.

The REDD+ mechanism aims to reverse current threats, while avoiding new ones emerging or existing threats growing. This requires changes in household behaviour and economic choices, but intervention at this level alone will not yield the required levels of mitigation of climate change. It is equally important for the companies that form part of the value chains of commodities associated with key drivers of deforestation and forest degradation to embrace sustainability and internalise its costs. Only an increased supply of products from sustainable sources will increase competitiveness and enhance the capacity of consumers to pay the premium for sustainability.

From timber to conservation concessions

Of equal importance are situations where the private sector aims to transform timber harvesting areas into REDD+ initiatives, as is happening in DRC, or applies for land and/or forest permits in order to implement REDD+ projects. The critical issue to consider in all cases is additionality. This is why cases where there are 'no communities', and thus no one to share benefits with, have to be analysed against a much wider perspective of what REDD+ was set up to achieve. The incremental benefit of emissions reductions 'with' and 'without' interventions (that is, REDD+ projects) is paramount to measuring effectiveness.

Some REDD+ projects target protected areas. In most countries, governments take the lead in managing these areas but encounter challenges. Carbon accounting and benefits should also be included in the protected areas in order to create an additional premium for strengthening the capacity of governments and local communities to manage them.

According to Costenbader (2011), the proceeds from forest revenues are shared at the national level according to the type of forest estate, rather than at a provincial or local level. This can result in large differences in carbon sequestration values, and opportunity and transaction costs among provincial or even local contexts, being overlooked. It can cause inequitable results for forest-dependent communities living inside or near commercially logged areas, and a lack of involvement in forest management and related decision making. One of the consequences of unfair benefit sharing, according to Costenbader, would be non-compliance. Legislation would need to be revised to align it with the objectives of REDD+.

However, several countries working towards REDD+ readiness have begun to discuss the adequacy of existing forest legislation to serve the objectives of REDD+. Any revisions can address the current legal shortfalls. For example, there is a real risk of marginalisation of local communities in high carbon stock areas if REDD+ initiatives claim there are no people living in or around the project area. Governments need to learn from current models of extraction of forest products and benefit-sharing mechanisms to develop legislation that provides equitable benefits for reducing emissions.

5.4 Realising equity through REDD+

Private sector-led REDD+ schemes should combine strategies that enable the participation of local land users and seek more innovative and inclusive business models. Co-ownership, or even ownership by local land users, and the clear agreement of communities to participate will avoid conflicts over tenure and land use that may result in leakage and lack of sustainable change. In the long run, such partnerships will pay more.

There are risks in co-ownership and partnerships, but part of the value that businesses bring is through taking reasonable risks and innovating. The rewards are both tangible and intangible benefits. WWF and CDP (2013) challenge businesses to turn climate problems into business opportunities, to take risks, and to tap into savings by factoring into current decisions the costs of future environmental damage and reflecting these in a carbon price. Paying a higher price for carbon will incentivise sustainable forest management by all involved.

Co-ownership of lands and forests offer one possible accounting 'space' for emission reductions, but higher financial gains are likely to come from investment in alternatives to fencing-out communities from high carbon stock protected areas. The private sector and NGOs need to rethink their current model if long-term solutions and emissions reduction are to be achieved.

Carbon benefits alone might be meagre, especially as markets are only developing. Compliance is not yet in place to create the demand needed to drive prices up. The private sector has the potential to transfer technology and financing to promote sustainable land use practices, yielding carbon benefits as a spin-off.

5.5 Key findings of this chapter

REDD+ is undoubtedly increasing the value of forests, and with it the risk of alienation of local land users. Smallholder farmers and forest-dependent people, as well as small and medium local enterprises, must therefore be involved. With some individual REDD+ projects reaching half a million hectares, there are bound to be multiple users and competing uses. Mapping the drivers as well as the actors is equally important to understanding whose practices need changing and what benefits might be expected.

REDD+ might promote the expansion of protected areas beyond the traditional biodiversity hot spots to carbon hot spots. While conserving carbon stocks is fundamental, there is a need to ensure that local immediate and long-term demands for forests are integrated. There is a need to map carbon stocks and threats to create a more comprehensive forest categorisation based on the commercial value of both tangible and intangible products.

Rights to carbon will inevitably build on existing rights to land and forest legislation that are based on the extraction of tangible products. The categorisation above should inform the process of developing a royalty system and a taxation system that is graduated by the threat of conversion.

While REDD+ architecture at the national and sub-national level suggests that the state will play a key role in receiving and distributing benefits of performance-based payments, re-distribution to the land users who make the actual changes is paramount.

The private sector and NGOs present REDD+ costs such as investment in capacity building, employment, sustainable practices and technologies as benefits to local communities. However, in this report these are not considered benefits – only the revenue from the sale of carbon or other products produced sustainably (for example, through agriculture, forestry or fisheries) can constitute benefits. The land users involved also invest their land and labour, and this is not accounted for in determining whether people are indeed deriving net gains or losses from the projects. The sharing of these revenues (gross or net) should be made explicit to determine the extent of REDD+ benefits for the private sector and for communities.

The DRC government is making use of existing legislation on forest concessions to tax companies on the use of forests for REDD+ projects. It applies the same area-based tax concept used for logging to REDD+ projects, on top of a corporate (net) income tax. These specific contractual provisions are important in defining the fiscal obligations and state benefits for private sector REDD+. However, as many have indicated, there is a need to define common rules through nationwide policy and legislation. This should include the process of FPIC, ensuring the provision of adequate and timely information, as well as ensuring wider participation of affected and interested people and communities.

Findings and conclusions

The Reduction of Emissions from Deforestation and Forest Degradation, Conservation of Forests, Sustainable Forest Management and Enhancement of Carbon Stocks (REDD+) mechanism is rapidly evolving in several countries, supported by the Forest Carbon Partnership Facility (FCPF) and the United Nations REDD Program (UN-REDD). Governments are developing national-level strategies for REDD+ and creating the enabling legal and institutional conditions for performance-based payments. At the same time, several private sector organisations and NGOS are testing REDD+ models on the ground on different scales.

Voluntary bodies, like NGOs, are seen as neutral and natural facilitators of REDD+ experimentation with local communities. The early engagement of the commercial sector in emission reduction initiatives is considered equally important, as the sector can capitalise on its market-based know-how and financing to take risks and innovate. Private sector engagement in REDD+ raises some concerns, however. The current policy and legal systems are not necessarily robust enough yet to allow 'investments' in non-provisioning ecosystems services such as carbon. The private sector requires control and long-term tenure security over the capital to make investment decisions. This means defining the physical boundaries of natural capital (currently involving large landscapes and long-term contracts) and determining the beneficiaries of any REDD+ projects. It is important to have clarity over tenure and who owns the rights to land, trees and the carbon they store, but most countries lack legislation on intangible products such as ecosystem services and carbon storage.

Distribution of private sector, NGOs and partnerships in REDD+ across continents

In the writing of this report, 115 REDD+ initiatives covering nearly 29 million hectares of land in 33 countries were documented. The analysis found that of the three regions covered (Africa, Asia and Latin America), Latin America had the largest number of individual projects, although projects in Asia covered the largest amount of land. NGOs are only slightly ahead in the development of REDD+ projects compared with private companies (36 per cent versus 35 per cent, respectively). There is also a significant share (11 per cent) of partnerships involving government, private companies and NGOs.

Diverse objectives and fuzzy boundaries

All projects aim to reduce emissions, but the other aims of the projects vary widely. The protected area (private and public) model is being extended to enable the protection of carbon stocks. Overall, generating carbon credits is being combined with meeting developmental goals such as improved livelihoods and securing rights of indigenous peoples and local communities. Private sector REDD+ projects also include the purchase of land to enforce sustainable practices while at the

same time aiming to meet the conventional goals of generating profit for their shareholders as well as driving innovation to inform the eventual development of a compliance market.

All actors establish boundaries. Project-level REDD+ is bound to define these frontiers, and exclusion runs through all interventions irrespective of the project leader (private sector, NGO or even government). This is expected as REDD+ projects have to demonstrate impact in terms of reduced conversion of forest land and reduced emissions; there has to be a carbon accounting unit. The only difference is the process of negotiation. Most REDD+ projects analysed seem to be concentrated in areas where small-scale agriculture and biomass energy production are the main threats, although a few examples also address unsustainable logging by concessionaires. It is important to address these drivers, but who is addressing the major drivers of deforestation such as large-scale commercial agriculture? Perhaps private sector REDD+ could do more in this area through private sector partnerships and exploring shareholding structures to ensure equitable benefits.

Engaging drivers and agents of deforestation

Effectively tackling deforestation and forest degradation requires addressing the drivers and the underlying causes. The latter include population growth and increases in demand for forest goods and services, as well as weak enforcement of legislation to curb unsustainable forest harvesting, conversion to agriculture, mining and infrastructure developments. Community involvement varies from active participation, to maintaining them in the periphery as passive cash recipients, to identifying them as 'non-existent'. However, the apparent absence of occupation of a forest does not often equate to an absence of use rights, and an assumption that it does is likely to result in future conflicts and most certainly in difficulties in controlling leakage and non-compliance. REDD+ projects need to be inclusive of local communities to reduce the risk of failure.

REDD+ increases the total value of forests, but risks increasing inequality if local communities are excluded from the benefits while still being required to bear the costs (addressing the drivers through land use change). Robust processes for free, prior and informed consent to elicit local communities' views are essential, both in agreeing to the projects in the first place and deciding how to distribute any resulting benefits. More inclusive business models could pave the way for extending REDD+ partnerships to other actors such as small-scale land users.

Control of carbon rights and challenges of REDD+ experiments

Although REDD+ projects cover a larger area in Asia, Latin America dominates in terms of the number of REDD+ projects in operation. The past experiences in participatory forest management and implementation of payment for ecosystem services, as well as the tenure regimes, create an environment that is conducive to more private sector REDD+ in Latin America.

There is a significant variation in the land size of the projects. Nevertheless, the fact that 29 million hectares fall under REDD+, alongside the long-term duration of the projects (spanning more than 100 years in some cases), underscores the fact that getting the rights 'right' is fundamental to ensuring permanence of interventions, avoiding land use conflicts in the medium and long run, and ensuring equity.

The delineation of carbon rights defines winners and losers in REDD+ implementation. The vast landscapes of REDD+ projects are intended to ensure effectiveness in addressing drivers, but many land users are likely to be affected and might rightly expect benefits. There is a need for a clear strategy of engaging a diverse range of actors, including small and medium enterprises, besides communities. They have a stake, and collective benefits contribute to sharing a common goal of reducing emissions.

Rights to carbon inevitably build on existing rights to land and forest legislation that are based on the extraction of tangible products. The categorisation of forests according to carbon stocks and threats should inform the process of developing royalty and taxation systems graduated by the threat of conversion.

The ad hoc contractual arrangements between government and project developers (from the private sector in particular) are useful in terms of providing lessons for REDD+. DRC offers an example of establishing agreements with the private sector that include key provisions on carbon tenure, FPIC, social agreements as well as fiscal obligations. Despite this, national-level legislation is necessary to ensure uniformity in rights and obligations in REDD+ implementation.

Opaque benefits mysteriously distributed

Community benefits vary just as widely. Overall, only 23 per cent of all projects reviewed explicitly state that communities are likely to receive a cash share of the carbon credits, and roughly 16 per cent of the projects provide some information on benefits to be allocated to the different players.

The various benefit-sharing mechanisms employed in REDD+ projects borrow from existing experiences in participatory forest management, payments for ecosystems services and high-value timber concessions. Paying a premium for sustainability is deemed necessary. Another important aspect is whether the benefit distribution reflects and adequately rewards the relative contribution of land users to reducing emissions. A combination of instruments, including tax and non-tax contributions from private sector REDD+, is necessary. While compensation should cover social infrastructure and services, long-term ambitions (with durations spanning from one to eleven decades) mean that community priorities are bound to change. Payments to individuals and households will become essential to changing their behaviour. Governments should avoid being too prescriptive about the application of REDD+ rewards. The focus should rather be on establishing transparent and inclusive decision making processes at the local level.

Publicly available contracts would better inform research and policy!

Of the 115 projects reviewed, only a small number of contracts were available online and only one was provided upon request. More contracts in the public domain could help in understanding the provisions and rationale, and facilitate learning about how the REDD+ architecture is evolving in different contexts and what works best under which circumstances. Confidentiality (evoked by companies and multilateral agencies to avoid disclosure) should not override the value of transparency in informing the development of robust evidence-based policy options and legislation.

Key conclusions of this study

Private companies and NGOs are both involved in REDD+ operations across the globe, and there is an acknowledged comparative advantage of their involvement. The assumptions made are that the private sector will contribute to closing the financing gap for REDD+ and steering the development of carbon markets that can sustain and reward demonstrated performance. On the other hand, the voluntary sector (i.e. NGOs) is perceived to be a neutral and philanthropic player whose objective is to help communities prepare for, and become involved in, REDD+ implementation. The common reality is that both players need to balance their books; both strive to maximise net returns, albeit for different reasons (one to satisfy their shareholders, and the other to ensure meaningful benefits to larger numbers of local beneficiaries and to finance its operations). Where relevant, this analysis has focused on private sector REDD+.

One of the guestions asked in this research is how and whether the 'business' as usual' core objective of profit maximisation by the private sector is compatible with a situation where cooperation with local land users is likely to determine the efficiency and effectiveness of addressing the drivers of deforestation and forest degradation. Can the boundary and exclusionary principles underpinning most private sector (and NGO, for that matter) investment deliver on additionality, permanence and avoiding leakage? The analysis of the case study from DRC indicates that the private sector is pursuing its conventional modus operandi and objective - offering employment and investing in technical know-how to transfer technologies to land users in order to achieve its goals. The private sector requires ownership and control over capital, including natural capital (forests in this case), in order to make and uphold long-term business decisions and investment. The size of that capital has to be large enough to ensure observation of REDD+ requisites. The challenge lies, however, in managing the existing multiple players and multiple interests within these large landscapes. Understanding the roles of these actors in deforestation and forest degradation, their willingness to change practices in order to reduce emissions, and the benefits of doing so will be paramount to successful REDD+ testing on the ground. REDD+ projects implemented either by the private sector or NGOs need to be inclusive to secure long-term emissions reduction and benefits for all involved.

The interventions aimed at addressing deforestation and forest degradation mainly represent traditional/conventional integrated conservation and development initiatives, the added benefit being that performance in reducing emissions will be rewarded. This suggests that past lessons on how to get this approach right need to be incorporated. The sustainability and successful delivery of REDD+ objectives relies on:

- Ensuring tenure arrangements include local control by communities and small and medium businesses
- Building stronger local institutions for decision making and upholding rules on the use and management of resources
- Supporting business capacity for implementing sustainable enterprises that are compatible with emissions reduction
- Providing technological know-how
- Access to financing to make meaningful investments, and
- Enabling access to markets for the goods and services generated.

Performance-based compensation mechanisms and governance issues, such as effectiveness of taxation, participation and equity in benefit sharing, are still challenges that need to be addressed. Key pillars for improving the governance of land tenure are pertinent to climate change mitigation initiatives. These include *understanding* who the land use actors are and the landscape of rights, *organising* land users according to roles, claims and interests, *engaging* them in sustainable land use options and *ensuring* that there is clarity of costs and benefits of the actors' involvement in sustainable land use practices.

Irrespective of scale and actors involved, there has to be long-term investment in alternative, productive, efficient land use practices. As in any business, considering and resourcing the investment, growth and consolidation phases of REDD+ delivery businesses is paramount. Experiences from participatory forest management show apparent failure because the change in land use practices at the local level was overambitious and transformation goals were set for the short run. This cannot be achieved. The fact that private sector projects last 25 years or more is indicative of the project profitability. Cost-benefit analysis should inform decisions about the viability of land use change for the local land users. It is benefits for these actors and the private investor that are likely to incentivise the long-term changes in behaviour that are needed to reduce emissions and generate co-benefits.

REDD+ is undoubtedly increasing the value of forests, and with it the potential alienation of local land users. Smallholder farmers and forest-dependent people, as well as small and medium local enterprises, must therefore be involved. With some individual REDD+ projects reaching half a million hectares, there are bound to be multiple users and competing uses. Mapping drivers as well as actors is equally important to understanding whose practices need changing and what benefits might be expected.

REDD+ projects led by the private sector, NGOs and even government take the notion of protected areas beyond the traditional biodiversity hot spots to carbon hot spots (for the stocks and threats). While conserving carbon stocks is fundamental, there is a need to ensure that local immediate and long-term demands for forest products and services are secured. There is a need to map carbon stocks and threats to create a more comprehensive forest categorisation based on the commercial and non-commercial value of both tangible and intangible benefits. Taxation and royalty systems should be designed taking into account the threats.

While REDD+ architecture at the national and sub-national level suggests that the state will play a key role in receiving and distributing benefits of performance based payments, redistribution to the land users who make the actual changes is paramount.

The private sector and NGOs present REDD+ costs such as investment in capacity building, employment, sustainable practices and technologies as benefits to local communities. However, only the incremental revenue from the sale of carbon or other products produced sustainably (for example, through agriculture, forestry or fisheries) can constitute true benefits. The land users involved also invest their land and labour, and this is often not accounted for in determining whether people are indeed deriving net gains or losses from the projects. This is why, for example, employment in this report is considered as participation rather than a benefit. The sharing of these revenues (gross or net) should be made explicit to determine the extent of REDD+ benefits for the private sector, NGOs, and communities.

Six recommendations for moving REDD+ forward

- 1. Private sector-led projects, as well as those led by NGOs and government, need to design robust systems to enable the participation of the myriad actors driving deforestation and forest degradation in landscapes where REDD+ is implemented. The total share of benefits for each stakeholder will be small, but perhaps that is the cost of sustainability that project developers, including the private sector, should be prepared to pay.
- 2. Effective participation and inclusive decision making requires information to be provided in a timely and effective manner, that is, presented in a form that is accessible to the different actors (including, for example, migrants and women) at the local level and allowing ample time for internal consultations.
- 3. Free prior and informed consent should be a sustained process. The large areas under REDD+ beg for inclusive models forging long-term partnerships and developing common goals amongst local actors, communities and small and medium businesses, while reducing emissions and contributing to livelihood improvements. FPIC should not be a one-off event, but rather a modus operandi of continuous engagement, negotiation and diffusion of potential conflicts.
- 4. Private sector engagement in the commercialisation of carbon stocks in forests requires development of clear legislation on who owns carbon rights, the

process of acquiring those rights, transferability, taxation and benefit-sharing mechanisms. At the national level there is a need to map and categorise the forests according to carbon stocks and threats to them. The long-term nature of REDD+ contracts requires such clarity, as conflicts may well arise in the medium and long term. Communities should own a stake in REDD+ investment based on the land they occupy and the forests they depend on, and this should be proportionate to the value of these resources.

- 5. Transparency of contracts for REDD+ initiatives and other information on the initiatives is fundamental to informing research and national and international debate on policy options. Therefore, the demands of confidentiality should not trump the greater public interest in developing effective policies and inclusive businesses for mitigating the impacts of climate change.
- 6. Governments need to move forward in developing national-level instruments, and not continue with ad hoc and site- or partner-based arrangements. This is needed to allow the private sector and NGOs to focus on developing models that acknowledge in a more pragmatic way the stakes and shares of different local players. Inclusive, viable and sustainable business requires collaboration and willingness to pay the cost.

The overall conclusion of this study is that, in addition to NGOs and government, the private sector is also increasingly experimenting in the implementation of REDD+ and testing the robustness of policy, legislation and markets. Private sector participation is welcome to bring technical expertise and to help close the financial gap, but fundamental for successful REDD+ is the adoption of inclusive models that acknowledge the rights of local people; the engagement of stakeholders beyond particular communities; benefit sharing; and FPIC as a continuous dialogue process. The private sector is engaging fast, and now it needs to become more inclusive not only to ensure the longevity and sustainability of its investments, but also to provide fair and equitable development opportunities to stakeholders in the landscape.

Finally, reiterating key elements for successful REDD+

Generating carbon credits requires investment in sustainable land use practices. Lessons from participatory forest management and investing in locally controlled forestry indicate the following necessary and sufficient conditions: the foundations for empowered communities – information, education and health; the pillars for investment in viable and sustainable land uses – rights, technology, financing, institutions (governance and enterprise) and market; the roof, i.e. the ultimate goal – in the case of REDD+, reduction of emissions and co-benefits. REDD+ projects must endeavour to adopt these conditions, combining them with a business approach and long-term investments to achieve transformative change.

The way forward

Analysis will continue on three fronts. First, countries with a high number of projects and at the forefront of preparing for and scaling-up REDD+, including Brazil, Indonesia and DRC, will be the subject of further study, as they are certainly leading the way from different perspectives. Second, we will continue the analysis of the extent to which the private sector actors engaged in REDD+ are also involved in carbon insetting, that is, addressing the major drivers along their supply chains. Finally, there will be further expansion of the database, updated information and more critical interrogation of and focus on the private sector.

References

- Angelsen, A Brockhaus, M, Kanninen, M, Sills, E, Sunderlin, W D and Wertz-Kanounnikoff, S (eds) (2009). Realising REDD+: national strategy and policy options. CIFOR, Bogor, Indonesia.
- Anthrotect (2011) The Chocó-Darién Conservation Corridor. Project Design Document. Colombia, Medellin. https://s3.amazonaws.com/CCBA/Projects/Choco-Darien+Conservation+Corridor/Anthrotect Choco Darien CCB PDD 062411.pdf
- Aronsen, I and Lindhjem, H (2011) Experiences with forest benefit sharing and issues for REDD-plus in Cameroon. Pöyry Management Consulting AS, Norway.
- Bernard, F, McFatride, S and Minang, P (2012) The private sector in the REDD+ supply chain: trends, challenges and opportunities. IISD, Winnipeg.
- Bond, I, Grieg-Gran, M, Wertz-Kanounnikoff, S, Hazlewood, P, Wunder, S and Angelsen, A (2009) Incentives to sustain forest ecosystem services: a review and lessons for REDD. Natural Resouce Issues No. 16. IIED, London, with CIFOR, Bogor, Indonesia and World Resources Institute, Washington, DC.
- Costenbader, J (2011) REDD+ benefit sharing: a comparative assessment of three national policy approaches. FCPF and UN-REDD.
- Cotula, L and Mayers, J (2009) Tenure in REDD: starting-point or afterthought? Natural Resources Issues 15. IIED, London.
- Cundy, C (2012) Digging out demand. *Environmental Finance*. www.environmental-finance.com/content/analysis/digging-out-demand.html
- Dahal, G R and K Adhikari, K (2011) South Asia Forest Tenure Assessment.

 Environment and Climate Series 2011/3. HELVETAS Swiss Intercooperation Nepal.
- Eliasch, J (2008). *Climate change: financing global forests.* The Eliasch review. Routledge, UK.
- Faerron, A S, Coral, A and Borge, C (2012) Lessons Learned for REDD+ from PES and conservation incentive programs: examples from Costa Rica, Mexico, and Ecuador. World Bank, Washington, DC.
- FCPF UN-REDD (2012) Readiness Preparation Proposal (R-PP). Version 6 Working Draft.

- Forest Trends (2014). Sharing the stage: state of the voluntary carbon markets 2014. Washington, DC. Available at www.forest-trends.org/vcm2014.php
- Garí, J A (2013) Pilot projects versus national policy in the REDD+ arena. www.un-redd.org/Newsletter39/PilotProjectsversusNationalPolicy/tabid/129673/Default.aspx
- Global Witness (2012) Safeguarding REDD+ finance: ensuring transparent and accountable international financial flows. London.
- Harnisch, J and Enting, K (2013) Country risk levels and cost of political risk of international greenhouse gas mitigation projects. *Greenhouse Gas Measurement and Management* 3(1-02) 55-63.
- Hepburn, S (2009) Carbon rights as new property: the benefits of statutory verification. *Sidney Law Review* 31(239) 239-271.
- IPCC (2013) Summary for policymakers. In *Climate Change 2013: The Physical Science Basis*. Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate.
- Macqueen, D (2013) Ringing the changes with a new approach to forest investment. Briefing Paper. IIED, London.
- Mahanty, S Guernier, J and Yasmi, Y (2009) A fair share? Sharing the benefits and costs of collaborative forest management. *International Forestry Review* 11(2) 268-280.
- Mayers, J, Maginnis, S and Arthur, A (2010) REDD readiness requires radical reform. Prospects for making the big changes to prepare for REDD-plus in Ghana. The Forests Dialogue.
- Mayers, J, Morrison, E, Rolington, L, Studd, K and Turrall, S (2013) Improving governance of forest tenure: A practical guide. IIED, London and FAO, Rome.
- Montero, S H G, Nhantumbo, I, Nuvunga, M and Vidal, R M (2014) Field dialogue on REDD+ benefit sharing. Co-Chairs' Summary Report, Quintana Roo, Mexico 02–05 June.
- Nhantumbo, I (2011) REDD+: Ready to engage private investors? Briefing Paper. IIED, London.
- Nhantumbo, I (2013) South-South REDD A Brazil–Mozambique initiative for zero reforestation with Pan-African relevance. Final Report. IIED, London.

- Nhantumbo, I and Camargo, M (2013) Carbon rights legislation: Not yet ready for private sector REDD+. Briefing Paper. IIED, London.
- Nhantumbo, I and Camargo, M (2014) Engagement of private sector in REDD+: rights and benefits issues. IIED Issue Paper produced for presentation at the World Congress on Agroforestry, India, 10-14 February 2014.
- OECD (2003) Poverty and health. DAC Guidelines and Reference Document. Available at www.oecd.org/dac/dacquidelinesandreferenceseries.htm
- OECD (2010) The role of the private sector in the context of aid effectiveness. Draft Strategy. www.oecd.org/development/effectiveness/45677388.pdf
- OECD (2011) Progress and challenges in aid effectiveness: what can we learn from the health sector? Final Report. Working Party on Aid Effectiveness: Task Team on Health as a Tracer Sector. www.oecd.org/development/effectiveness/48298309.pdf
- Peskett, L (2010) Benefit sharing in REDD+: exploring the implications for poor and vulnerable people. World Bank, Washington, DC. and REDD-net.
- Peters-Stanley, M, Hamilton, K and Yin, D (2012) Leveraging the landscape: state of the forest carbon markets 2012. Ecosystem Marketplace, Washington, DC.
- Pham, T T, Brockhaus, M, Wong, G, Dung, L N, Tjajadi, J S, Loft, L, Luttrell, C and Assembe Mvondo, S (2013) Approaches to benefit sharing: a preliminary comparative analysis of 13 REDD+ countries. Working Paper 108. CIFOR, Bogor, Indonesia.
- Porras, I (2013) Payments for environmental services: lessons from the Costa Rican PES programme. Presented at the Fair Ideas Conference, 16-17 June 2012, Rio de Janeiro. IIED, London.
- RRI (2014) Status of forest carbon rights and implications for communities, the carbon trade, and REDD+ investments. Ateneo de Manila University and RRI.
- Sunderlin, W D, Larson, A M, Duchelle, A E, Pradnja Resosudarmo, I A, Huynh, T B (2014) How are REDD+ proponents addressing tenure problems? Evidence from Brazil, Cameroon, Tanzania, Indonesia, and Vietnam. *World Development* 55 37-52.
- UNDP (2009) The Global drylands imperative: devolving resource rights and the MDGs in Africa. Nairobi.

- Unilever (2014) Unilever issues call for businesses to step off the sidelines in fight against climate change. Press Release. 20 May 2014. www.unilever.com/mediacentre/pressreleases/2014/Unileverissuescallforbusinessestostepoffthesidelinesinfightagainstclimatechange.aspx
- UNEP (2011) Reddy set grow. Part 2: Private sector suggestions for international climate change negotiators. A study by UNEP Finance Initiative's Biodiversity and Ecosystems Workstream (BEWS) and Climate Change Working Group (CCWG). Geneva.
- Walker, N., Patel, S., Davies, F., Milledge, S. and Hulse, J. (2013). Demand-side interventions to reduce deforestation and forest degradation. IIED, London, UK.
- WWF (2012). REDD+ for people and nature. Case study of an integrated approach to REDD+ readiness in Mai-Ndombe, Democratic Republic of Congo. WWF and Ministry of Environment, Nature Conservation and Tourism of DRC.
- WWF-US and CDP (2013) The 3% solution: driving profits through carbon reduction.

Annex List of REDD+ projects

This list of REDD+ projects forms part of the database used to write this report. The list of projects was generated by the authors, based on information from third party standards and selected REDD+ databases. The standards used include the Verified Carbon Standard (VCS), Plan Vivo, Carbon Fix, the Climate, Community and Biodiversity Alliance (CCBA) Standard, the American Carbon Registry (ACR) and the Chicago Climate Exchange (CCX). Databases sourced include the Forest Carbon Portal project inventory, the Institute for Global Environmental Studies (IGES) REDD database, and the REDD Desk database.

Africa

Country	Project
Cameroon	1. Community Payments for Ecosystem Services (PES) in the Congo Basin
	2. Dja Biosphere Regional REDD+ Project
	3. The Sangha Trinational (TNS) Forest Conservation Area
	4. Conserving the Cross River Gorilla Landscape: piloting a landscape-scale approach to reducing emissions from deforestation and forest degradation (REDD) Takamanda national park
	5. REDD+ Project for the support zones of Korup National Park
DRC	6. Mai Ndombe REDD
	7. Isangi Reduced Emissions from Degradation and Deforestation Project
Ethiopia	8. NTFP-PFM, Ethiopia
Ghana	9. The Ghana Cocoa Carbon Initiative
	10. Forest, Climate, Communities and Alliance
	11. Nyankamba Community Resource Management Area REDD Project
Kenya	12. The Kasigau Corridor REDD Project – Phase I Rukinga Sanctuary
	13. The Kasigau Corridor REDD Project – Phase II The Community Ranches
	14. Mikoko Pamoja
	15. Mt. Elgon Regional Ecosystem Conservation Program
	16. Promoting Conservation Through Trees for Carbon Sequestration and Livelihoods Improvement in Madunguni Forest Reserve
Madagascar	17. Holistic Conservation Programme for Forests in Madagascar
	18. Makira Forest Protected Area Project
Malawi	19. Forest Conservation in Nyika National Park and Mkuwazi Forest Reserve, Malawi
Tanzania	20. REDD in the Yeada valley, Northern Tanzania
	21. Carbon Tanzania / Ujamaa Community Resource Trust – Mongo Wa Mono / Mpingo Conservation Development Initiative"
Uganda	22. Budongo-Bugoma Landscape REDD+ Project
Sierra Leon	23. Sierra Leone Mutual Forestation
Zimbabwe	24. Kariba REDD+ Project

Asia

Country	Projects
Cambodia	25. Reduced Emissions from Degradation and Deforestation in Community Forests – Oddar Meanchey, Cambodia
	26. REDD+ feasibility study in Prey Long district
India	27. Umiam Sub-watershed REDD+ Project
Indonesia	28. Rimba Raya (Infinite Forest) Reserve
	29. Reducing Carbon Emissions from Deforestation in the Ulu Masen Ecosystem
	30. Berau Forest Carbon Program
	31. Kalimantan Forests and Climate Partnership (KFCP)
	32. Leuser Public Private REDD Project
	33. Merang REDD pilot project
	34. Mawas Peatlands Conservation Area Project
	35. Tropical Forest Conservation for Reducing Emissions from Deforestation and Forest Degradation and Enhancing Carbon Stocks in Meru Betiri National Park, Indonesia
	36. Forest Land Use and Climate Change in North Sulawesi (FLUCC) in the Poigar Forest
	37. Marubeni Proposed REDD+ Project, Central Kalimantan, Indonesia
	38. "FY2011 Global Warming Mitigation Technology Promotion Project: REDD+ Survey in Mangrove forest in Indonesia"
	39. Indonesia Australia Forest Carbon Partnership – Kalimantan Forests and Climate Partnership (KFCP)
	40. Indonesia Australia Forest Carbon Partnership – Sumatra Forest Carbon Partnership (SFCP)
	41. Kapuas Hulu (Forclime)
	42. Avoided deforestation project in Malinau, East Kalimantan
	43. Jayapura REDD Pilot Project
	44. Reducing Emissions from Deforestation caused by the Oil Palm Sector in West Kalimantan
	45. Sulbar Habitat, West Sulawesi
	46. Katingan Peat Forest Restoration Project, Central Kalimantan
Lao PDR	47. Participatory Land and Forest Management Project for Reducing Deforestation in Lao PDR (PAREDD)
	48. Global Warming Mitigation Technology Promotion Project: Feasibility Study on Building a REDD+ Scheme in Laos
Malaysia	49. INFAPRO Rehabilitation of logged-over dipterocarp forest in Sab
Nepal	50. Design and setting up of a governance and payment system for Nepal's Community Forest Management under Reduced Emission from Deforestation and Degradation (REDD)
	51. Rupantaran, Nepal
PNG	52. April Salumei Sustainable Forest Management Project
	53. Kamula Doso Improved Forest Management Carbon Project
Sri Lanka	54. Hiniduma Biodiversity Corridor project

Latin America

Countries	Projects
Argentina	28 La Canada
Belize	29. Boden Creek Ecological Preserve Forest Carbon Project
	30. Bull Run Overseas Forest Carbon Project Phase I
	31. Rio Bravo Climate Action Project
Bolivia	32. Noel Kempff Climate Action Project
	33. Protection of the Bolivian Amazon Forest project
Brazil	34. The Juma Sustainable Development Reserve Project: Reducing Greenhouse Gas Emissions from Deforestation in the State of Amazonas, Brazil
	35. Action Project against Global Warming in Guaraqueçaba
	36. Atlantic Rainforest Conservation Project
	37. Verde Rio Project
	38. Surui Forest Carbon Project
	39. RMDL Portel – Para REDD
	40. ADPML Portel – Pará REDD Project
	41. Arinos Mata ViVa
	42. Cikel Brazilian Amazon REDD APD Project – Avoiding Planned Deforestation
	43. Florestal Santa Maria project
	44. `Halitinã RED project
	45. The Purus Project: A Tropical Forest Conservation Project in Acre, Brazil
	46. Genesis
	47. Avoided Deforestation on Small Rural Properties in the Region of the Transamazon Highway
	48. Ecomapuá Amazon REDD project
Colombia	49. San Nicolas Carbon Sequestration Project
	50. Pachamama
	51. Chocó-Darién Conservation Corridor Project
Costa Rica	52. The Pax Natura Project/Avoided Deforestation Through the Payment of Environmental Services in Rainforests Located on Private Lands in the Conservation Area of the Central Volcanic Mountain Range
	53. Programmatic project for the payment for environmental services to mitigate greenhouse gas emissions through avoided deforestation of privately owned tropical rainforests in high conservation value areas in the Central Volcanic Range of Costa Rica
Ecuador	54. Carbon Balanced projects (4 sites)
	55. REDD project in Orellana Province - Face afforestation program
	56. Redd Project in Nangaritza
	57. Yasuni Ishpingo

El Salvador	58. Avoided Deforestation in the Coffee Forest in El Salvador
Guatemala	59. Laguna
Guyana	60. Konashen Community-Owned Conservation Area
	61. Upper Essequibo Conservation Concession
Honduras	62. Pico Bonito REDD
Mexico	63. Sierra Gorda Wildlands Forever
	64. Much Kanan K aax
	65. Mother Earth's Respect and Conservation Pact: the Lacandonia Jungle, Chiapas, Mexico
	66. Carbon capture and emission reductions in the ejido Reforma Agraria, Marques de Comillas, Chiapas
	67. REDD+ Proyect for the Communitarian Management of the Territory: The Case of Amanalco Area, Mexico State
	68. REDD+ Project for the Communitarian Management of the Territory: the Mayan Area of Jose Maria Morelos, Quintana Roo
	69. Carbon Sequestration in Indigenous and Rural Communities in Oaxaca
	70. Carbon Sequestration in the Private Reserve El Zapota
	71. Mitigating Climate Change through Sustainable Forest Management and Capacity Building in the Southern States of Mexico (States of Campeche, Chiapas and Oaxaca)
	72. Biosphere Reserve Selva el Ocote pilot project
Paraguay	73. Reserva de la Biosfera del Bosque Mbaracayu
	74. The Paraguay Forest Conservation Project Reduction of GHG emissions from deforestation and forest degradation in the Chaco-Pantanal ecosystem
	75. The Paraguay Forest Conservation Project
Peru	76. Alto Mayo REDD+ Initiative
	77. FY2010 Global Warming Mitigation Technology Promotion Project: REDD+ Survey in Peru: Alto Mayo project
	78. Cool Earth Ashaninka project
	79. Biocorridor Martin Sagrado REDD+ Project
	80. Madre de Dios Amazon REDD Project
	81. REDD project in Brazil nut concessions in Madre de Dios, Peru
	82. Cordillera Azul National Park REDD Project
	83. Reducción de la deforestación y degradación en la Reserva Nacional Tambopata y en el Parque Nacional Bahuaja-Sonene del ámbito de la región Madre de Dios
	84. Yurilamas REDD Project
	85. Los Amigos Offset Program
	86. Multicomunal Conservation Area of the Commonwealth of Yacus
	87. REDD Project in the Ecotourist Concession Inkaterra and the conservation concessions of Bioconservación Amaru Mayo and Inkaterra – Tambopata
	88. The Belgica Native Community REDD project

Natural Resource Issues

Natural resources are having the life squeezed out of them. Volatile commodity prices have highlighted both the vulnerability of poor people to rapid rises in food and energy prices and the associated 'squeeze' on natural resources. Escalating competition for such resources (including biodiversity, energy, forests, food, land and water) will reshape patterns of investment, production and consumption among countries and social groups and between cities and rural areas. The Natural Resource Issues series presents peer-reviewed, easy to read material on issues that cut across these sectors. Each issue draws on original research to make conclusions that are particularly relevant for policy makers, researchers and other opinion formers in the field concerned.

Issues in the series can be downloaded for free from www.iied.org or hard copies purchased from www.earthprint.com. Residents of non-OECD countries can sign up to IIED's free publication scheme by emailing newbooks@iied.org to receive these publications for free.

We welcome reactions and feedback on the series and are always interested in suggestions for future issues. To contact us, please email the Series Editor, James Mayers (james.mayers@iied.org) or the Series Coordinator. Nicole Armitage (nicole.armitage@iied.org).

Recent issues are listed by their series number below.

- 11. All that glitters: A review of payments for watershed services in developing countries. 2008. Porras et al.
- 12. Fair deals for watershed services in South Africa. 2008. King et al.
- 13. Fair deals for watershed services: Lessons from a multi-country action-learning project. 2009. Bond and Mayers.
- 14. Creating and protecting Zambia's wealth: Experience and next steps in environmental mainstreaming. 2009. Aongola *et al.*
- 15. Tenure in REDD: Start-point or afterthought? 2009. Cotula and Mayers.
- 16. Incentives to sustain forest ecosystem services: A review and lessons for REDD. 2009. Bond et al.
- 17. Water ecosystem services and poverty under climate change: Key issues and research priorities. 2009. Mayers et al.
- 18. Community management of natural resources in Africa: Impacts, experiences and future directions. 2009. Roe *et al.* (also available in French).
- 19. Sharing the benefits of large dams in West Africa. 2009. Skinner et al. (also available in French).
- 20. Investment contracts and sustainable development: How to make contracts for fairer and more sustainable natural resource investments, 2010. Cotula.
- 21. REDD+ in dryland forests: issues and prospects for pro-poor REDD in the miombo woodlands of southern Africa. 2010. Bond et al.
- 22. Social assessment of conservation initiatives: A review of rapid methodologies. 2010. Schreckenberg et al.
- 23 Development and gorillas? Assessing fifteen years of integrated conservation and development in southwestern Uganda. 2010. Blomley *et al.*
- 24. Bundles of energy: the case for renewable biomass energy. 2011. Macqueen and Korhaliller.
- 25. Pro-poor certification: Assessing the benefits of sustainablility certification for small-scale farmers in Asia. 2012. Blackmore and Keeley.
- 26. Foreign investment, law and sustainable development: A handbook on agriculture and extractive industries. 2013. Cotula.
- 27. Getting it together: How some local organisations in East Africa have succeeded in linking conservation with development. 2014. Hughes *et al.*
- 28. Waterered down? A review of social and environmental safeguards for large dam projects. 2014. Skinner and Haas.
- 29. Chinese views of African forests: evidence and perception of China-Africa links that impact the governance of forests and livelihoods. 2014. Sun *et al.*

REDD+ for profit or for good?

Review of private sector and NGO experience in REDD+ projects

Despite slow progress to securing a robust international agreement on climate change, progress has been made on REDD+ during Conference of the Parties (COP) negotiations, notably in the Cancun Agreement and the more recent Warsaw REDD+ Framework. Bilateral and multilateral funding support has also generated and maintained momentum for both REDD+ readiness and testing at the country and project levels. This testing is vital to help clarify responses to questions such as who contributes to reducing emissions, how will performance-based payments be made and who is eligible for them, and how will results be measured and monitored? Such initiatives are funded through public and private sources, and most are also, in effect, testing the functionality of carbon markets. The results shed much light on the challenges and opportunities in the roles of the private sector, NGOs and government. The motivation of the research reported on here was to better understand private sector and NGO engagement in REDD+ in particular.

Natural Resource Issues No. 30

ISBN: 978-1-78431-133-9

ISSN: 1605-1017

International Institute for Environment and Development 80-86 Grays Inn Road, London WC1X 8NH, United Kingdom



Knowledge

Research Report

April 2015

Forests

Keywords:

REDD+, private sector



