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REDD+ AND CARBON RIGHTS: CASE STUDIES

PROPERTY RIGHTS AND RESOURCE GOVERNANCE PROJECT (PRRGP)

FEBRUARY 2012

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ACRONYMS AND ABBREVIATIONS

AA	Authorized Association
ANSAB	Asia Network for Sustainable Agriculture and Bioresources
BAL	Basic Agrarian Law
BPN	Indonesia National Land Agency
CAPRI	Collective Action and Property Rights
CBFM	Community-Based Forest Management
CEMDA	*El Centro Mexicano de Derecho Ambiental* (Mexican Center for Environmental Law)
CFUG	Community Forest User Group
CIFOR	Center for International Forestry Research
CONAFOR	*Comisión Nacional Forestal* (National Forestry Commission of Mexico)
CPN	Communist Party of Nepal
CTC	Consultative Group
DDC	District Development Committee
DFCC	District Forest Coordination Committee
DFO	District Forest Office
DoE	Division of Environment
DUAT	*Direito de Uso e Aproveitamento da Terra* (Right of Use and Benefit to Land)
EPIQ	Environmental Policy and Institutional Strengthening Indefinite Quantity Contract
ERC	Ecosystem Restoration Concession
FAO	Food and Agriculture Organization of the United Nations
FBD	Forest and Beekeeping Division
FCPF	Forest Carbon Partnership Facility
FECOFUN	Federation of Community Forest Users, Nepal
FPIC	Free, Prior and Informed Consent
GHG	Greenhouse Gasses
GTZ-CBC	German Technical Assistance Community Based Conservation

IAFCP	Indonesia-Australia Forest Carbon Partnership
ICEL	Indonesian Center for Environmental Law
ICRAF	World Agroforestry Centre
IDP	Internally Displaced Person
IIED	International Institute for Environment and Development
ITC	*Iniciativa para Terras Comunitarias*
JFM	Joint Forest Management
JICA	Japan International Cooperation Agency
KCPF	Kalimantan Forest Carbon Partnership
LOI	Letter of Intent
LSGA	Local Self Government Act of 1998
MoFSC	Ministry of Forests and Soil Conservation
NEFIN	Nepal Federation of Indigenous Nationalities
NGO	Nongovernmental Organization
NORAD	Norwegian Agency for Development Cooperation
NTFP	Non-Timber Forest Product
PES	Payment for Environmental Services
PFM	Participatory Forest Management
PROCEDE	*Programa de Certificación de Derechos Ejidales y Titulación de Solares Urbanos* (Program for Certification of Ejidal Rights)
PSAH	Payment for Hydrological Services
REDD/REDD+	Reducing Emissions from Deforestation and Forest Degradation
R-PIN	Readiness Plan Idea Note
R-PP	Readiness Preparation Plan
RUPES	Reward for Use of and shared investment in Pro-poor Environmental Services
SAO	*Servicios Ambientales de Oaxaca*
SDC	Swiss Agency for Development and Cooperation
TAPHGO	Tanzania Pastoralist and Hunter-Gatherer Organization
TFWG	Tanzania Forest Working Group
TSA	*Tribunal Superior Agrario* (Superior Agrarian Tribunal)
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change

USAID	United States Agency for International Development
VDC	Village Development Committee
VLFR	Village Land Forest Reserve
WMA	Wildlife Management Areas
WRI	World Resources Institute

INTRODUCTION

The Property Rights and Resource Governance Project carbon rights study assesses experience to date with defining rights to receive benefits related to carbon emissions reductions and removals at national and sub-national levels, with the emphasis on benefits relating to forest carbon under REDD+. This collection of case studies examines five developing countries, representing a range of approaches to defining carbon rights. The study assesses whether each approach does or could result in effective resource governance and equitable benefit sharing at the local level. These form recommendations for each country, but also provide lessons for the framework carbon rights study. Field visits were performed in each of the following countries for one to two weeks between January and June 2011 and involved interviews with government officials, private sector actors, as well as local stakeholders, particularly focusing on experience to date with project level REDD+ and payment for environmental services (PES) activities.

1.0 MEXICO

1.1 STUDY OVERVIEW

Field visit: Darryl Vhugen of Landesa and Ruth Nogueron of WRI visited Mexico from 1-12 March 2011 to gather information for the case study. The team conducted interviews in Guadalajara, Mexico City, Oaxaca (including a visit to a REDD+ project site in Tlahuitoltepec community) and Chiapas (including a visit to the El Ocote protected area) (Figure 1.1).

1.2 BACKGROUND

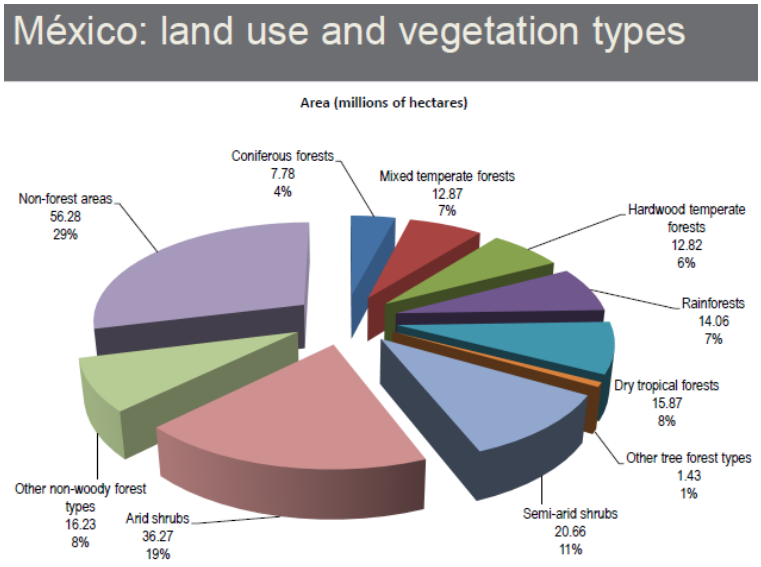
Sixty-six percent of Mexico's national territory is covered by forests (63.5 million hectares) and scrubland and other types of low vegetation (64.1 million hectares). Forests cloak mountain ranges throughout the country. Rich in biodiversity, cloud forests and dry forest are the most endangered forests in the country. Only 0.2 million hectares of Mexico's forests are devoted to forest plantations, consisting mostly of pines and hardwoods (USAID, 2011a; Figure 1.2).

Forest communities in Mexico own most of the country's forestlands (Varela and Cruz, 2011). However, they rely primarily on agriculture and cattle-raising for local employment rather than on the forest sector. Conversion of forestland for farming and livestock uses is the country's primary driver of deforestation. Though deforestation rates have decreased over the past few decades, forest degradation and deforestation continue at an annual rate of 0.4 percent. Forest fires, illegal logging, and the collection of fuel wood also contribute to deforestation.

Deforestation and degradation of forest resources is the source of 14 percent of Mexico's greenhouse gas ("GHG") emissions and the sector has the potential to account for 38 percent of Mexico's GHG reduction in the future (Mexico Readiness Preparation Proposal [R-PP], 2010).

FIGURE 1.1: MAP OF MEXICO AND LOCATIONS VISITED FOR REDD+ INTERVIEW

FIGURE 1.2: MEXICO LAND USE AND VEGETATION TYPES



1.2.1 LAND LAWS

Mexico's agrarian reform started in 1917 and caused profound changes in what had been Mexico's inequitable, largely feudal-like approach to land distribution. Under the 1917 Mexican Constitution, property becomes private when the federal government, which has the primary ownership of all land, transmits it to citizens or communities. Thus, from 1917 to 1992, the Government broke up large farms to enable the distribution of approximately 100 million hectares of land to *ejidos* and *comunidades,* which are rural village collectives and indigenous communities that have communally-held land. Through the years, the land distribution process varied according to changing legal, technical, political and ideological forces. The economic role of *ejidos* also changed, from being a source of additional income for communities working in

large farms in the 1920s, to being one of the pillars of agricultural development, akin to the private agricultural sector in the 1990s (Blanco & Mojarro, 2011).

By Presidential resolutions, *ejidos* are created with members receiving non-transferable use rights to individual parcels and communal lands. Until 1992 use rights were heavily regulated, requiring *ejidatarios* to live and work their lands and transfer them to a sole heir; and prohibiting contracts with private parties (Varela & Cruz, 2011). Typically, individual families have use rights to the land for their house and a plot on which to farm, while forestland is held communally.

The following significant changes occurred by way of a constitutional amendment and new Agrarian Law adopted in 1992:

> The reform legalized and encouraged the formation of joint ventures of communities and *ejidos* with private capital and an accompanying agrarian law provided the means for *comuneros* and *ejidatarios* to become private owners and to rent and sell their land to third parties. These reforms also sought to legalize informal property rights and to stimulate rural investment by allowing *ejidatarios* and *comuneros* to use their holdings as collateral for raising capital. The forest commons, however, could not be subdivided in individual parcels and sold, thus remaining excluded from privatization (Corbera et al., 2011, p309 [emphasis added]).

The 1992 reforms also included a land certification program called PROCEDE, which allowed 96 percent of agricultural households to register their land rights by 2005. Despite the reforms, very little registered *ejido* land has been fully privatized to allow for the sale of this land to non-*ejidatario* buyers (USAID, 2011a). However, if only communal land, including forestland, is considered, PROCEDE has certified 78 percent of *ejidal* land and 49 percent of *comunal* land. Communities with uncertified land have somewhat less secure tenure over it (Robles, 2011).

The principle land administration institutions are the Secretary of Agrarian Reform (*Secretaria de Reforma Agraria* – SRA) and the National Agrarian Registry *(Registro Agrario Nacional* – RAN). SRA helps to implement PROCEDE, oversees national land and administers government land takings. RAN is primarily responsible for land registration (USAID, 2011a).

While the Mexican government has eminent domain powers, the power is relatively narrow and requires reasonable compensation. Land owned by *ejidos* is especially well protected from unreasonable government takings. Such takings are subject to clear rules requiring the government to conduct an appraisal and pay fair market value to the *ejido* as compensation (USAID, 2011a).

Overall, "Mexico differs from most developing countries in the sense that property rights over land and forests are secure and most of the land (estimates range between 53 and 80 percent) is owned by indigenous and agrarian communities" (Benneker & McCall, 2009).

1.2.2 FORESTLAND LAW

About 50 percent of forestland, approximately 33 million hectares, in Mexico is owned communally by *ejidos* or *comunidades* (Mexico R-PP 2010). Tenure is unclear in about 2 million hectares of forestland (Corbera, 2011). The remaining forest areas are owned privately or by the state.

The Law on Sustainable Forest Development, 2002, primarily governs forest-related activity in Mexico. The law sets for the requirements for obtaining authorization to use forest resources. It also makes it incumbent on all Mexicans, including the government, to conserve, protect, sustainably use and restore forested areas of the country. Other important laws affecting the forests include: the General Law on Ecological Equilibrium and Environmental Protection, which regulates biodiversity; the Wildlife Law, which governs the use of wildlife and plants in the forest; and the General Law on Sustainable Rural Development, which regulates rural development activities in or involving the forests (Anta Fonseca, 2004).

Generally speaking, cutting down and removing forest products are prohibited activities in the absence of a government-approved forest management plan or logging permit (Corbera 2011). Permits, generally issued for 10-year terms, are issued by the Secretariat of the Environment and Natural Resources (SEMARNAT) (Anta Fonseca, 2004).

One of the objectives of ProArbol (Mexico's forestry program) is to support forestland holders in reforestation projects through Payment for Environmental Services Intervention payments that are intended to cover the opportunity cost of dedicating their lands to activities other than silviculture. This objective provides a potential basis for REDD+ activities.[1]

The Community Forestry Program of CONAFOR, Mexico's national forest commission, has helped to create and strengthen community forestry institutions that have led to decreased pressure on the forests. According to Benneker and McCall (2009), "community forestry has been widely recognized to have contributed significantly to the management and conservation of communal forest areas in Mexico."

1.2.3 *EJIDOS* AND *COMUNIDADES*

There are two types of communal land tenure found in Mexico. *Comunidades* and *ejidos* are legal entities that have the right to govern themselves, define how they will use their land and establish the boundaries of such uses within the communal properties. To exercise this right, the *comunidades* and *ejidos* must develop internal regulations and register them with the *Registro Agrario Nacional* (National Agrarian Registry). The regulations should address the organizational structure of the community, the rules to admit new members to the community and the rules and criteria to decide on the use of the land.

Generally speaking, Mexican law imposes no restrictions on how these communities use and manage land. A significant exception is communally held forestland, where the exploitation of resources is restricted as explained above (Brown, 2004).

As a result, communities can have different institutions, governance mechanisms and decision-making processes. There are, however, common organizational structures within the *comunidades* and the *ejidos*:

- The general assembly – is the highest authority within a *comunidad/ejido*. In the *ejido,* it includes all *ejidatarios*. Among other things, the assembly is responsible for articulating and modifying the *ejido* regulation, admission of new members, distribution of economic resources and approval of contracts or agreements with external actors, and allocation of areas for different land uses.

- The *comisariado ejidal/de bienes comunes* (*ejido*/common goods commission) is in charge of representing and executing the agreements of the assembly. The members of the commission (at a minimum a president, secretary and treasurer with their substitutes) are appointed by the assembly. Among other things, the commission is also responsible for the management of the common goods of the *ejido* according to the guidelines established by the assembly, and to ensure that the rights of the members of the *ejido* are respected.

- The enforcement council is responsible for overseeing the activities of the *ejido*/common goods commission to ensure that it fulfills its obligations and follows the regulations established by the assembly. The members of the council (a president, two secretaries with their substitutes) are also appointed by the assembly.

In a *comunidad* the land belongs to the community based on a Presidential Resolution or a resolution from the *Tribunal Superior Agrario* (Superior Agrarian Tribunal or TSA in Spanish). The land cannot be subdivided for

[1] CONAFOR interview.

individual property. According to the Agrarian Law, all forests are to be managed as communal lands. *Comunidades* have the power to convert themselves to *ejidos*.

In an *ejido,* the land also belongs to the community based on a Presidential Resolution or a TSA resolution, but the land can be subdivided for the individual use of the *ejidatarios*, which is generally the head of the household, usually the husband or father. Each *ejidatario* shares rights to communal lands, but may also own individual parcels. In *ejidos*, most forest land is communally owned, although individuals may own parcels up to 800 hectares for agroforestry uses such as coffee plantations. Individually held land can be sold within the *ejido* but not to outsiders unless the general assembly has expressly approved privatization of the individual parcels (Robles, 2011; USAID, 2011a).

1.3 MEXICO'S DEVELOPING REDD+ STRATEGY

Mexico, as of writing this report, had not yet adopted its REDD+ strategy. In late 2010, it adopted a "Vision for REDD" which sets forth the following three general goals (Government of Mexico, 2010):

1. "In 2020 Mexico will have zero net emissions associated with land use change and, additionally, it will enhance existing carbon stocks, ensuring the preservation of biodiversity and ecosystem integrity through actions such as sustainable forest management, conservation activities, and enhancement of carbon stocks."

2. "By 2020, the national rate of forest degradation in Mexico will be reduced significantly compared to the reference level. Sustainable use of resources, as well as natural and induced regeneration, will spread. Uncontrolled fires will be effectively discouraged: improved prevention, combat and control or ecosystem disturbing agents will be in place; and incentives for sustainable land use practices will be created. Also acknowledged is the need for stronger law enforcement, more effective environmental education and increased participation so as to promote the value of forests in support of efforts to eliminate illegal markets for wood, forest products and non-timber forest products."

3. "By 2020 Mexico will have maintained its territory's biodiversity, strengthened rural communities social capital and promoted economic development through sustainable rural development."

The government is in the process of preparing a REDD+ strategy. Several interviewees agreed that it is important that the strategy be completed and adopted before the June 2012 presidential election. If it is not, the strategy probably will not be adopted prior to 2013 as the newly elected president will not take office until six months after the election and the outgoing president will be reluctant to adopt any significant new initiatives.[2]

A consultative group (CTC) has been formed to prepare a REDD+ strategy. The CTC grew out of the original REDD+ working group that was formed to work with CONAFOR, the lead government agency for REDD+. The CTC now has more than 50 members. After preparing Mexico's R-PP,[3] the group began working on the REDD+ Strategy in mid-2010.[4] The group is comprised of representatives from virtually all relevant stakeholders with one glaring exception: indigenous groups are not well-represented. The wide disparity of perspectives represented in the CTC has slowed the process of developing a REDD+ strategy as has the lack of any approved international REDD+ regime.[5]

Although the REDD+ strategy is very much a work in progress, several themes emerged during interviews and while reviewing literature that seem likely to find a place in the strategy:

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2 Interviews with Anthony Challenger of SEMARNAT and with Santiago Enriques and Gabriela Lozada of ABT Associates (March 3 2011).
3 Mexico is a member of the World Bank's Forest Carbon Partnership Facility.
4 Interview with Juan Manuel Frausto Leyva of Fondo Mexicano Para La Conservacion de la Naturaleza, A.C. (March 3 2011).
5 Challenger interview.

1. Some aspects of the REDD+ system are likely to be based on Mexico's current forest program, known as ProArbol. This approach relies on the country's existing system of Payment for Environmental Services ("PES") for benefit distribution (Benneker & McCall, 2009).

2. The approach will be based upon sustainable community forestry, as suggested in the Vision for REDD+ and by several interviewees.[6] This approach will emphasize giving forest communities the right to exploit forest resources so as to combat poverty and sustainably manage the resources (Mexico R-PP, 2010). Thus, Mexico may not rely heavily on new or expanded protected areas that prohibit resource use, at least not without the agreement of local communities,[7] although one report states that the government is likely to establish REDD+ programs in perhaps 40 percent of existing protected areas (Corbera, 2011).

3. A REDD+ program is likely to be established within the broader context of sustainable community development. Most stakeholders recognize that REDD+ alone will not make a substantial contribution to poverty alleviation and that development in Mexico will not be tied to carbon. Rather, REDD+ will be viewed as one of many development strategies.[8]

4. Participation of forest communities in REDD+ has been and will continue to be voluntary (USAID, 2011a).

1.4 INSTITUTIONAL ARRANGEMENTS

Although REDD+ institutional arrangements have not yet been determined, it appears likely that CONAFOR will continue to be the lead institution at the national level. While no decision has been made as to whether or not REDD+ payments will flow through the federal government, via more decentralized paths, or through a combination of the two[9], it seems that Mexico will likely adopt a nested approach.[10] That is, key actors expect the federal government to monitor and account for emissions nationally while REDD+ activities are implemented at the sub-national level by state or local governments, communities, private developers or NGOs.

At this point some state government officials believe that the federal government seems to want to bypass states in favor of working with local governments. The basis for this belief is not clear. But some states, such as Chiapas, are enacting their own strategies and REDD+ activities for which they intend to receive benefits but they will try to do so within the parameters of the national strategy.[11] It is not clear how this nested arrangement will function.

1.5 REDD+ BENEFIT DISTRIBUTION

The benefit distributed under the current CONAFOR PES system and the REDD+ pilot projects included in this study is in the form of cash. We did not encounter any projects where benefits are offered in any other form, such as infrastructure improvements, land tenure rights or social capital.

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6 Interview with Juan Carlos Carillo of CEMDA (Mexican Center for Environmental Law) (March 11 2011).

7 Challenger interview. However, one expert expressed fears that the government might use protected areas as one of the pillars of the REDD strategy, to the detriment of the communities located in those areas. Interview of Professor Leticia Merino Perez (March 3 2011).

8 E.g., Merino Perez interview.

9 Interview with several CONAFOR representatives, including Jose Maria Michel Fuentes, Paula Bauche Peterson, Sofia Magdalena Garcia Sanchez and Leticia Gutierrez Lorandi (March 2 2011).

10 Challenger interview; Enriques and Lozada interview.

11 Interview of Alejandro Callejas Linares, Undersecretary of Environment, State Government of Chiapas.

1.5.1 CONAFOR PES PROGRAM

It appears likely that the existing CONAFOR PES program will be the predominant model for REDD+ benefit distribution. The most prominent PES program involves payments for hydrological services.[12]

CONAFOR enters into 5 year contracts with landholders who apply to participate in the program. Contracts are awarded to the applicants who score highest under a points system established by CONAFOR. Factors for which points are assigned include the risk of deforestation, existence of indigenous communities, participation of women, whether or not communities have good internal rules governing natural resource use and other factors listed in the regulations. Clear land tenure is a prerequisite. Contracting parties agree to make no land use changes and protect the land from illegal logging and forest fires so as to protect and enhance the water services provided by the forest on their land. Payments are made over the 5 year term. CONAFOR monitors performance remotely and by sending inspectors (Benneker & McCall, 2009

Most of the contractors are *ejidos* or *comunidades*.[13] A majority of the community assembly (the governing body) must approve the terms of the contract with CONAFOR. The community decides how to spend the money based on its internal decision-making practices.[14]

Few communities have effective governance rules and mechanisms. The government is helping *ejidos* update and improve their rules so they receive more points on their PES contract applications. They are trying to build capacity in the less skilled communities so that they can participate.[15]

As of 2010, about 5,400 small landowners, *ejidos*, and *comunidades* have received approximately $429 million under this program.[16] Thirty percent of the PES budget goes to communities in protected areas. The government has the power to impose protected areas on local communities even in the face of community opposition. According to CONAFOR (and others), this action usually does not happen due to political factors. Communities have representatives on the advisory committee that manages the protected area.[17]

1.5.2 SERVICIOS AMBIENTALES DE OAXACA (SAO) PROJECT[18]

SAO is an NGO based in Oaxaca. It has helped to establish REDD+ projects in several communities in Oaxaca. The research team visited a *comunidad* named Tlahuitoltepec, the site of one such project.

The community initiated a PES project with CONAFOR several years ago. Using native species they reforested 75 hectares of land per year for 5 years ending in 2008. The reforested land was degraded land where people had cut trees for firewood and agricultural crops.

The REDD+ project began after the end of the CONAFOR PES contract. The project is managed within the community by an elected Agrarian Authority consisting of 10 members and 16 assistants. In Tlahuitoltepec, no members are women, though there are eight female assistants. The Authority's duties include deciding how to spend REDD+ revenues and who will be paid to do reforestation work.

All forest land is communally-owned so there is no private land involved in the project. A few people were cultivating on degraded land that was included in the reforestation project, so they moved voluntarily to other agricultural land to accommodate the project.

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12 A third program, payments for carbon sequestration, is dormant.

13 Comunidades are typically indigenous, are managed somewhat differently, and fall under different rules than *ejidos*.

14 CONAFOR representatives interview.

15 Id.

16 USAID Case Studies on Institutional Mechanisms for Benefit Sharing.

17 Id.; Presentation by Roberto Escalante (CONANP director of El Ocote reserve) March 9 2011.

18 Content in this section is derived from interviews with Tlahuitoltepec community Agrarian Authority members and Alejandro, the SAO technician (March 6 2011); Carlos Marcelo Perez of SAO (March 7 2011) and Jose Antonio Benjamin Ordoñez – Diaz of Pronatura (March 8 2011).

SAO technicians assist the community to conduct reforestation activities, maintain the forest properly and measure the amount of carbon sequestration. SAO also interacts with Pronatura, a Mexico-based conservation NGO which, among other things solicits carbon payments for SAO, thereby assuming the role of a broker. Both SAO and Pronatura issue certificates to the buyers to verify carbon sequestration results. The project is not affiliated with any of the internationally recognized carbon verification standards. Carbon funds flow through SAO and then to the community. Most of the costs of the SAO technicians are paid by contributions from donors to SAO, although SAO can receive up to $1 of the carbon payment per ton.

The revenues are paid to the Agrarian Authority which spends the money on: (1) costs incurred by the Authority; (2) paying people to work in the forests, planting trees and providing security; and (3) community improvement projects. There is no apparent relationship between receipt of carbon revenues and land rights as benefits go to individuals in the form of wages for working on the project. In other SAO projects land is owned by individual families. In those cases, the family receives a proportionate share of the carbon payment based on the size of their land holding.

Pronatura began to broker carbon credit sales over the past 3 years. It solicits carbon-related payments from corporations and foundations in Mexico on behalf of SAO and the ten communities participating in the project. For Tlahuitoltepec, Pronatura sold newly sequestered carbon from the reforested area to the Televisa Foundation, the charitable arm of the large Mexican media company. Televisa entered into a 1-year written contract with SAO on behalf of the community, although they made a verbal commitment of 5 years. Other buyers include two Mexican companies, Gambesa and Chinoin. The price of carbon is $10/ton from which both SAO and Pronatura receive $1/ton each, while the international market price ranges from $3-7/ton. Presumably, the buyers are willing to pay extra for the goodwill the project may elicit. The project had sold nearly 85,000 tons of carbon as of March 2011.

1.5.3 AMBIO PROJECTS IN CHIAPAS-SCOLEL'TE AND EL OCOTE

Perhaps the best known Mexico-based REDD+ project operating is the Cooperativa Ambio's Scolel'te project in the state of Chiapas. Ambio, an NGO, designs and implements PES projects in communities in southern Mexico (Cooperativa Ambio 2011).

The Scolel'te project involves the sale of Plan Vivo carbon credits. The price in March 2011 was about $3/ton. Landholders (*ejidos* in this case) receive 5 payments over 8 years in return for providing environmental services that increase carbon sequestration. Payment amounts reflect the amount of additional carbon sequestered in the project area using the Plan Vivo carbon monitoring system. Since the project began in 1997, 395,704 tons of CO_2 equivalent have been offset.[19] Lessons from the project formed the basis for much of the content of Mexico's R-PP.[20]

Ambio is working to establish another REDD+ pilot project with three *ejidos* in the El Ocote Reserve area of Chiapas State. They chose the *ejidos* based on the suitability of the area, how well the communities are organized and their experience with CONAFOR PES projects. Traditionally, the *ejidos* have simply divided CONAFOR PES revenues equally among members of the *ejidos* (known as "*ejidatarios*"). They have not invested the funds in community assets or shared revenues with non-*ejidatarios*, although they are legally empowered to do so. Carbon revenues will have to be handled differently under a REDD+ project as some of the money will have to be reinvested in the system for monitoring, paying technicians and other project-related expenses.[21]

[19] Interview of Elsa Esquivel of Ambio (March 9 2011); Cooperative Ambio website. URL: http://www.ambio.org.mx/site/index.php?option=com_content&view=article&id=24&Itemid=42&lang=en (accessed April 11 2011).

[20] Enriques and Lozada interview.

[21] Esquivel interview.

1.6 ENTITLEMENT TO RECEIVE REDD+ BENEFITS UNDER MEXICAN LAW

Mexico has not adopted laws creating any new "carbon rights" or explicit entitlements to receive benefits under a REDD+ regime. However, existing rights to land and environmental services implicitly form the basis for an entitlement to receive such benefits. In this respect, the Mexican Constitution (Article 27) and the Forest Sustainable Development Law (Article 5) clearly state that landowners, including *ejidos*, communities, indigenous communities and individuals own the forest resources on their land (General Sustainable Forest Management Law, 2003). The rights of indigenous communities to access and use the resources found on their native lands are also protected by Article 2 of the Mexican Constitution.

Mexico's Forest Sustainable Development Law and the General Wildlife Law both include carbon sequestration in the definition of environmental services. Income derived from environmental services is specified in several parts of this legislation as accruing to landowners. For example, when referring to the promotion of a market for environmental goods and services the Forest Sustainable Development Law says it should adequately compensate forestland owners for the services provided to other sectors of society (Articles 133-134). When referring to the issuance of environmental goods and service bonds the Law states they could be created to compensate landowners for environmental services generated as a result of forest conservation (Article 142). Finally, when referring to the creation of a Mexican Forest Fund, the Law states that income to the fund deriving from environmental goods and services will be channeled to the service providers, with a percentage subtracted to cover the costs of operation (Article 143).

In light of these regulations it is safe to conclude that REDD+ carbon rights are likely to be considered as a type of environmental service provided by forests or ecosystems and that, and benefits accrued would primarily go to the owners of such forests.[22]

Because most forest land is communally owned and PES schemes have focused on *ejidos* and *comunidades*, it is reasonable to assume that REDD+ projects in Mexico will focus primarily on communally-owned areas, just as the pilot projects do today. As explained above, land and tree tenure in communally held areas under the control of *ejidos* and *comunidades* seems relatively secure and should not be undermined by REDD+ projects. That is, it seems unlikely that outside actors will be able to take advantage of insecure tenure to claim carbon rights in order to seize REDD+ benefits.

In addition, REDD+ projects probably will not be established in areas where land tenure rights are unclear. PES regulations in Mexico do not permit landowners to enter into PES contracts unless they have clear and undisputed ownership or possession of the land (Corbera, 2011). Thus, one can predict that REDD+ may not exacerbate existing land tenure disputes because projects probably will not be established in areas where conflicts exist. At the same time, there is no indication that REDD+ implementation will be used to resolve such disputes.

The 2011 CONAFOR ProArbol call for proposals requires potential beneficiaries to be of Mexican nationality and to provide legal title to substantiate their ownership or possession of the land. In the case of *ejidos* or communities CONAFOR requires the presidential resolution establishing the *ejido* or community and definitive boundary definitions, but it does not require prior certification by PROCEDE (Operations Rules for ProArbol, 2011). This definition is an important one since making PROCEDE certification as a requirement to apply for REDD+ could exclude a significant portion of communally held yet uncertified land, especially those lands held by indigenous communities.

Potentially difficult issues may arise regarding how REDD+ benefits will be distributed within those communities with clear tenure. The elected leaders of the general assemblies of *ejidos* and *comunidades* govern

[22] Carillo interview; Robles at 3-4.

the allocation of land and resource rights in the communities. In *ejidos*, only *ejidatarios* can vote in the assembly,[23] and only those who could establish residency at the time the *ejido* was formed can be *ejidatarios* without permission of the assembly (USAID, 2011a). Thus, in many areas, there are many non-*ejidatario* residents who are excluded from important community decision-making processes. Will they be similarly excluded from any REDD+ payments made to the community for improved land-use practices in communally-owned forests?[24] The example of the *ejidos* in the El Ocote area may provide some insight: PES payments have been divided among *ejidatarios* and not shared with any other members of the community or invested in community improvements. We do not know if this caused conflict but clearly the potential exists.

Presumably, the REDD+ system will include a requirement that communities invest some of their REDD+ payments in project maintenance, as Ambio requires in its REDD+ projects. Thus, *ejido* community leaders may not be able to continue to make all payments directly to *ejidatarios*. This situation will leave even fewer funds to share with non-*ejidatorios*.

If disputes arise within the communities over the distribution of REDD+ benefits, it is important to understand how they will be resolved. The 1992 Agrarian Law created new courts ("Tribunales Unitarios Agrarios") to resolve rural land disputes. The system includes an appeals court and other dispute resolution mechanisms. However, this system does not appear to be well-suited to handle disputes within the community over the distribution of REDD+ benefits, especially where, as will usually be the case in communally-owned forest land, the benefits are not tied to a particular plot of land. Thus it is unlikely that this system will be able to intervene effectively. There is no other suitable alternative dispute resolution system in Mexico. It seems unlikely that the regular civil court system could fairly and efficiently resolve REDD+ benefit disputes.[25]

1.7 SOCIAL AND ENVIRONMENTAL IMPACTS OF THE REDD+ SYSTEM ON FOREST-DEPENDENT COMMUNITIES

To some extent, it is too early to predict the social and environmental impacts of a REDD+ mechanism on forest-dependent communities. There is the potential that the distribution of REDD+ benefits could create conflict between *ejidatarios* and non-*ejidatarios*, as explained above, although this form of communal land tenure has been working for a century and its internal governance structures may be able to resolve conflicts when they arise. Another potential issue is that REDD+ payments could undermine the traditional willingness of community members to work voluntarily for the community. If a REDD+ project pays them to work in the forest will they continue to do other community work for free?[26] In this regard, requirements that may be established within REDD+ schemes to reinvest revenues to support community development activities (i.e. sustaining schools, health centers or other community institutions) may, in some cases, be a more suitable approach for benefits deriving from forest commons.

1.7.1 WOMEN

The impact of REDD+ on women is another serious concern. Women in Mexico were largely excluded from the land redistribution reforms and most land in *ejidos* and *comunidades* is held by men. The PROCEDE program mostly certified land in the names of the male heads of household; there was no joint titling as the law called for putting *ejidal* and *comunidad* land in the sole name of the *ejidatarios* or *comuneros* (Brown, 2004). Few women hold land use rights or have the right to vote in community Assemblies. Wives of *ejidatarios*

[23] The same is true of *comuneros* in *comunidades*.
[24] See Corbera, et al, at 322; Interview of Kevin McGlothin, Team Leader, Economic Growth and Environment, USAID Mexico City.
[25] Carillo interview; Enriques and Lozada interview.
[26] Callejas Linares interview.

usually are not *ejidatarios* themselves so they are not involved in community decision-making. In the El Ocote area *ejidos*, for example, women attend the meetings but always sit in the back.[27]

The status of women has improved in some *ejidos*, especially where NGOs are working on this issue. The SAO REDD+ project in Oaxaca appears to have made some marginal improvements in the lives of some women in Tlahuitoltepec community in two respects. First, there has been some progress in increasing the participation of women in community decision-making. Although they are not full-fledged members of the Agrarian Authority, the opinions of the women serving as assistants are listened to and respected. Second, women are among those hired to do reforestation work, something that would not have happened a number of years ago.[28]

In its PES contract award process, CONAFOR has attempted to encourage communities to begin to empower women. Communities in which women play a meaningful role in decision-making are more likely to receive a PES contract than those that do not.[29]

Migration presents an additional and significant challenge for REDD+ implementation. Many rural communities tend to be populated mostly by women, children and old men because many of the younger men have migrated to the cities or abroad in search of better employment opportunities. As a result, communities sometimes find it difficult to make decisions as the predominantly male decision-makers are often away. In their absence the communities may not have the legal authority to enter into contracts.[30]

Some of those interviewed expressed doubts that rural communities will be willing to make substantial changes to their social traditions in order to qualify to receive REDD+ benefits. Many communities currently qualify for CONAFOR PES contracts without having to make such changes, although, as indicated above, communities are somewhat more likely to receive such contracts if they can show increased participation of women. If communities already receive PES funds without allowing women to participate, will they accept women's empowerment measures as a condition of receiving REDD+ benefits?[31]

REDD+ projects may not worsen the situation of women but there is no indication that the receipt of REDD+ benefits will improve their lives in the short to medium term. It will undoubtedly be necessary to include women's empowerment as a part of the overall process of long-term capacity building that REDD+ implementation will require.

1.7.2 INDIGENOUS COMMUNITIES

Indigenous land tenure rights in Mexico, especially for indigenous communities that have formed comunidades or *ejidos* are relatively secure as Mexican law provides substantial protection to such rights. Between 53 and 80 percent of all land in Mexico is owned by indigenous and agrarian communities (Benneker & McCall, 2009). A REDD+ program is unlikely to pose a significant threat to such rights.

However, for the most part, indigenous communities are not participating in the process of developing a national REDD+ strategy. Several interviewees stated that this trend is a significant problem and agreed that it is very important to find a way to include these communities in the process.

The drafters of Mexico's R-PP recognize the difficulty of including Mexico's widely diverse indigenous community in the REDD+ strategy development process (Mexico *R*-PP, 2010). Reviewers of the R-PP remain critical, stating that the R-PP "largely fails to recognize the special needs, circumstances, and rights of

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27 USAID Country Profile at 9-11; Carillo interview; Enriques and Lozada interview; Esquivel interview.
28 Rickards interview; Marcelo Perez interview.
29 CONAFOR interviews.
30 Merlino Perez interview.
31 Enriques and Lozada interview; Rickards interview. It should be noted that one interviewee thought that it could be possible to include women's empowerment as a condition of receiving REDD+ funds in Chiapas. Callejas Linares interview.

indigenous peoples, including their linguistic and cultural diversity, and does not have a clear strategy for consulting with indigenous peoples organizations" (Kaimowitz et al., 2010).

Including indigenous communities in the development of REDD+ in Mexico is perhaps more difficult than in other countries for a number of reasons. First, there are no national organizations that are recognized as being broadly representative of such communities. Second, conflicts among indigenous communities make it difficult to bring them into the process as they are reluctant to work together. Third, some indigenous communities perceive REDD+ as being very political and thus something to avoid.[32]

There was consensus among the interviewees and other commentators that participation of forest communities in REDD+ is and probably will continue to be voluntary.[33] Government officials maintain that even new or expanded protected areas will not be imposed on communities that strongly oppose them.[34] However, there is reason for some concern as to whether communities, especially indigenous communities whose populations are often less educated, will have the capacity to make informed decisions regarding whether to participate in REDD+ projects.

Interviewees also agreed that most forest communities currently lack the capacity to understand REDD+ and to participate in the program.[35] Only 10-15 percent of these communities are successfully managing their forests.[36] The State of Chiapas and NGOs such as Fondo Mexicano, SAO and Ambio are working to build the necessary capacity.[37] The Scolel'te and SAO projects demonstrate that communities can learn to successfully manage REDD+ projects and invest REDD+ revenues. But the process is time-consuming and expensive. It is not clear whether or not REDD+ projects or complementary programs will include sufficient funding for the necessary capacity-building to enable forest communities, especially the often more-isolated indigenous communities, to participate successfully in REDD+.

1.8 WILL DISTRIBUTION OF REDD+ BENEFITS INCENTIVIZE THE DESIRED LAND USE BEHAVIOR CHANGES?

The primary driver of deforestation in Mexico is the conversion of forests for pasture and agricultural crops (USAID, 2011a; Benneker and McCall, 2009). The fundamental causes of deforestation have been described as: "1) the profound inequality that characterizes Mexican society and the disadvantaged position of forestry communities in negotiations with local, state, and federal agencies as well as with the private sector that is the ultimate buyer of their resources; and 2) the deep seated disagreement about the importance of protecting the environment and assuring its integrity for future generations while providing a reasonable livelihood on the basis of the precepts of sustainable production" (Barkin and Garcia, n.d.).

Will the implementation of a REDD+ program cause those who engage in deforestation practices to use the forest differently? There are three important factors to consider.

First, the R-PP expresses concern over ensuring that benefits flow to those who would otherwise engage in deforestation (Mexico R-PP, 2010). Where the tenure situation is unclear, including an estimated two million hectares, there is little or no chance to direct benefits to the right people or institutions (Corbera, 2011). Thus, in implementing REDD+ Mexico may decide to avoid such areas of unclear tenure, which means the loss of an opportunity to change land use in those areas (Corbera, 2011). Even where the tenure situation is clear, it

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[32] Enriques and Lozada interview; Challenger interview; Callejas Linares interview; Rickards interview; Frausto Leyva interview; Carillo interview.
[33] E.g., Challenger interview; Benneker and McCall 2009.
[34] CONAFOR interviews; CONANP interview. At least one community in the Lacandona area of Chiapas, however, claims otherwise. See, URL: http://www.redd-monitor.org/2011/04/07/redd-alert-in-chiapas-mexico/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+Redd-monitor+%28REDD-Monitor%29. Accessed April 12 2011.
[35] E.g., Enriques and Lozada interview; Rickards interview.
[36] Merino Perez interview.
[37] Callejas Linares interview; Frausto Leyva interview; Carlos Perez interview; Esquivel interview.

will be necessary to ensure that all actors (individuals, *ejidos* or *comunidades*) are actively involved in developing the project and understand and support the agreements (Mexico *R*-PP, 2010).

As indicated above, a great deal of time and money will be required to ensure that communities have the knowledge and skills to decide whether and how to participate in REDD+. It is not clear who will provide the necessary technical assistance for this massive undertaking. Currently, CONAFOR provides outside technicians to communities with PES contracts. They are exploring the possibility of hiring and training technicians to live in the communities, an approach already adopted by SAO and Ambio. Support for this capacity building process will be provided by the central government, the international donor community and potentially from a payment for performance system of REDD+.

Second, the government and the CTC have yet to consider how to handle payments under REDD+ if the country fails to meet emissions targets. It therefore is not clear who will bear the risk.[38] If individual communities comply with their agreements will they be denied benefits if the nation as a whole fails? This is a significant danger of a national system and highlights the need for insurance systems such as risk 'buffers' that keep a proportion of emissions reductions credits in reserve.

Third, it is unclear whether or not REDD+ will provide benefits that are adequate to compensate for the opportunity costs of alternative forest land uses while also financing development and administration of the REDD+ system. Mexican government agricultural and cattle raising subsidies greatly exceed current PES payments or potential REDD+ payments.[39] Some anecdotal evidence suggests that current PES payments are not enough to incentivize conservation practices.[40] Capacity building and administration will be very costly.[41] In Mexico, as in many other countries, a significant issue is whether or not REDD+ revenues will ultimately be sufficient to pay for the costs of operating the system and incentivizing the desired behavior.

1.9 SUGGESTED CHANGES IN LAW AND PRACTICE

Mexico might consider several changes in law and practice in connection with its REDD+ program. First, CONAFOR currently enters into five-year contracts with communities to provide PES services. Much longer terms will be required under REDD+. *Ejidos* are legally permitted to enter into contracts of up to 30 years. CONAFOR should consider significantly lengthening the terms of their PES agreements in order to facilitate an effective REDD+ system while recognizing and accounting for the dangers of locking in communities to terms that become unfair or to which they cannot comply over much longer contract terms.

Second, under current law, logging permits must be renewed annually. Community forest management plans are usually only for one year terms (Benneker & McCall, 2009). As REDD+ projects will require forestland use commitments of far longer durations, the government should consider changing the law to allow permits and forest management plans of much greater length.[42] For REDD+ projects the government might consider an approach similar to one provided by the Mexican General Wildlife Law, whereby landowners with wildlife management permits may simply and easily renew their permits rather than being required to submit entirely new applications (Aguilar, 2009).

Third, Mexico should seek opportunities to empower women in forest communities as part of its REDD+ capacity building and implementation efforts. Because most REDD+ projects will probably be located in areas where forestland is communally owned, the key to improving the status of women in those areas is to find ways for women to participate meaningfully in community decision-making. Strategies could include giving priority in placing REDD+ projects to communities that include women in REDD+ project

[38] CONAFOR interview; Enriques and Lozada interview; Rickards interview.
[39] Enriques and Lozada interview.
[40] CONAFOR interview.
[41] Note that the SAO pilot does not pay for itself, despite receiving a carbon price well in excess of the international market price. Ordoñez – Diaz interview.
[42] Merino Perez interview.

management similar to CONAFOR's current practice in awarding PES contracts. Those providing REDD+ technical assistance to communities also can and should be trained to work with communities to increase the involvement of women. Widespread male migration from forest communities may actually present an opportunity to persuade those communities to place more women in positions of authority to maintain community development in the absence of the men.[43] Finally, the CTC should seek to ensure that organizations representing women have greater participation in the development of the REDD+ strategy.

Fourth, anecdotal evidence suggests that NGOs are not fully informing communities of the potential benefits of participating in REDD+ projects. For example, Ambio does not tell communities about REDD+ revenue potential for fear of unduly raising expectations. They have only discussed other benefits of REDD+ including improvement in land use practices and sustainable development. Similarly, SAO has not told the communities that carbon buyers have orally agreed to 5 year contracts. While taking steps to avoid unreasonable expectations is sensible, communities should have all the facts about actual and potential projects so they can make fully informed decisions. Also, providing complete information may give all members of the community a better chance to participate. Clear guidance for communication of project activities should be made available.

Fifth, Mexico should base its REDD+ system on its already successful sustainable community forestry program rather than on expanding protected areas that have the potential to displace forest dwellers and undermine livelihoods. Sustainably managed forests have the potential to sequester more carbon than protected forests in which trees cannot be harvested and can also be more effective in maintaining or expanding forest cover (Barry et al., 2010). Community forestry is also more consistent with protecting existing community rights to forest lands and community decision-making (Barry et al., 2010).

At the same time, however, REDD+ programs can target communities residing in existing protected areas as a measure to enhance community livelihoods and contribute to poverty alleviation goals rather than undermine them. The government may establish REDD+ projects in 40 percent of protected areas. This approach may create an important opportunity, if the resident communities agree to participate on a fully-informed, voluntary basis.

Sixth, the PROCEDE land certification process should be recharged with a renewed effort to certify communally owned land of *ejidos* and *comunidades*. This effort should focus in particular on *comunidad* land, less than half of which has been certified. Doing so will make it more likely that such lands can be included in a REDD+ system that is based on the CONAFOR PES process that requires clear land tenure as a condition of a PES contract.

Finally, Mexico should consider whether or not the country will try to use REDD+ as a vehicle for resolving land disputes in the 2 million hectares of forestland where land tenure is neither clear nor secure. As discussed above, there is some doubt over whether REDD+ revenues will be adequate to pay for administration costs and incentivize the desired behavior in areas where tenure is not an issue. Accordingly, it seems even less likely that the system could pay for the additional costs of regularizing property rights and dispute resolution (Corbera, 2011).

[43] See Brown, J. (2004). *Ejidos* and comunidades in Oaxaca, Mexico: Impact of the 1992 Reforms. Seattle, Washington: Landesa.

MEXICO CASE STUDY ANNEX A: LIST OF INTERVIEWS

Type of Organization	Organization Name	Contacts Interviewed & Title
Government	CONAFOR	Jose Maria Michel Fuentes, Paula Bauche Peterson, Sofia Magdalena Garcia Sanchez; Leticia Gutierrez Lorandi
	SEMARNAT	Anthony Challenger
	CONANP Mexico City	Javier Medina
	CONANP	Roberto Escalante, Director of El Ocote Reserve
Local Government	State Government of Chiapas	Alejandro Callejas Linares , Undersecretary of Environment
Village Government	Technician, Servicios Ambientales de Oaxaca (SAO)	Alejandro
	Tlahuitoltepec community	Several members of the Agrarian Committee
	Ambio	Several community technicians
Universities and Research Institutions	UNAM	Professor Leticia Merino Perez
Local Civil Society	Fondo Mexicano Para La Conservacion de la Naturaleza, A.C.	Juan Manuel Frausto Leyva, Director Forest Conservation Program
	Servicios Ambientales de Oaxaca (SAO)	Carlos Marcelo Perez
	Pronatura	Jose Antonio Benjamin Ordoñez – Diaz
	Ambio	Elsa Esquivel
	CEMDA (Mexican Center for Environmental Law)	Juan Carlos Carillo, Attorney
	Red Mexicana de Organizaciones Campesinas Forestales	Gustavo Sanchez Valle, President
International Institutions	World Wildlife Fund Program Mexico	Jorge Rickards, Director of Conservation
Bilateral Agencies	USAID Mexico	Kevin McGlothlin, Team Leader, Economic Growth and Environment, and Natural Resources Advisor, Salvador Sanchez Colon
International NGOs	Conservation International	Juan Carlos Franco Guillen, Climate Change Coordinator in Mexico
Private Firms	ABT Associates	Santiago Enriques, Environmental Management Director, and Gabriela Lozada, Grants Manager

2.0 INDONESIA

2.1 STUDY OVERVIEW

Field visit: Darryl Vhugen of Landesa and Crystal Davis of WRI visited Indonesia from 23 January to 1 February 2011 to gather information for the case study. Crystal made a second visit from 11 to 18 July to gather additional information. The team conducted interviews in Jakarta, Bogor and Bali. On her follow-up visit, Crystal went to Central Kalimantan Province where she met with members of the Provincial REDD Working Group and visited a REDD+ pilot project in the Districts of Kotawaringin Timur and Katingan. She also visited a Reward for Use of and shared investment in Pro-poor Environmental Services (RUPES) project in the district of West Lampung.[44]

2.2 BACKGROUND

Indonesia's land area of 190 million hectares supports a population of 220 million people. About 49 percent of the land area is covered by forests, although the Ministry of Forestry (MoF) classifies approximately 70 percent of the country as forestland. The difference stems from loss of trees to deforestation and the MoF's refusal to reclassify forestlands that have been converted to other uses. Indonesia contains the third largest tropical rainforest ecosystem on Earth.

MoF distributed 1.2 million hectares of forests for mining concessions from 2004-2009. It plans to distribute a further 1.2 million hectares between 2010 and 2020. Over 5 million hectares of forestland has been converted to oil palm plantations in support of Indonesia's huge palm oil industry (USAID, 2011b).

FIGURE 2.1: MAP OF INDONESIA AND LOCATIONS VISITED FOR REDD+ INTERVIEWS

[44] A complete list of interviews is attached as Annex A.

A relatively unique feature of Indonesia's ecosystem is the presence of vast peat lands. There are 32.6 million hectares of such lands, making up 12 percent of the nation's land area. These areas are estimated to contain 40 billion tons of carbon that, if released, would emit 100 billion tons of CO_2 into the atmosphere (Fogerty, 2010).

Indonesia's overall rate of deforestation has been extremely high, at roughly 2 percent per annum. It was the highest in the world in 2003. The primary drivers of deforestation in Indonesia, which vary somewhat across the geographic regions, are the demand for timber, illegal logging, land conversion (often for the palm oil industry) and mining. The majority of logging is illegal. Most of the minerals and metals for which there is demand are found in forests. Globally, Indonesia is among the largest emitter of greenhouse gases and seventy-five percent of Indonesia's emissions are caused by deforestation (USAID, 2011b).

In May 2011 Indonesia's president signed a decree establishing a limited 2-year moratorium on logging in connection with the Norway-Indonesia REDD+ Partnership (discussed below). The decree essentially bans new logging of primary forests and peat lands not already subject to concessions that have been finally approved or approved in principle. Forest lands required for "national development" projects and the extension of existing permits also are excluded from the ban. The decree has been criticized by many as overly favoring the palm oil industry. Consequently, many question whether or not it will result in any significant reduction in deforestation.[45]

2.3 INDONESIA'S LAND AND FOREST LAWS

2.3.1 LAND LAWS

Indonesia is a "negative outlier" in terms of land tenure security.[46] The nation is plagued by "complex layers of unresolved property rights. The complexity extends from the relationship between individuals and local communities, between both of these [entities] and local government [and] between sub-national entities and Indonesia as a state…" (Galudra, 2010).

The Basic Agrarian Law ("BAL") is the most important law governing land rights. The BAL recognizes rights of ownership (*hak milik*) akin to permanent freehold, non-permanent use rights (*hak pakai*), a type of commercial agricultural lease (*hak usaha*) and a right to build (*hak guna bangunan*).

The BAL recognizes, but contains only relatively weak protections for customary law of traditional *adat* communities, including those living in forested areas. Read literally, the BAL applies to all land in the country. However, since adoption of the Basic Forestry Law in 1967, the BAL has not been applied to forests. This arrangement did not change with enactment of a new Forestry Law in 1999. Application of the Forestry Law, together with the 1967 Law on Mining, has effectively nullified the BAL's weak protections of customary land rights because the Ministry of Forestry has, in practice, refused to recognize customary rights (USAID, 2011b).

Customary land law in Indonesia is very complex. Customary land rights and practices vary widely across the country. The BAL recognizes *adat* law as a primary source of land law but only if it does not conflict with other aspects of the BAL or the national interest. It does not easily accommodate the variety of customary land practices. The law and the government provide only very weak recognition of communal *adat* land rights. Thus, forest dwellers with communal land practices have virtually no tenure security.

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45 See Lang, C. (2011). Indonesia's president signs the decree on forest moratorium: Too little, too late. REDD-Monitor.org. Available at: http://www.redd-monitor.org/2011/05/20/indonesias-president-signs-the-forest-moratorium-too-little-too-late/

46 Interview of William Sunderlin, Principal Scientist-Climate Change Forests and Governance Programme, CIFOR, January 26 2011.

By law, the National Land Agency (BPN) is responsible for determining the status of, allocating, registering and regulating all land classified as non-forest although some of its authority has been devolved to provincial and district offices (USAID, 2011). As explained below, however, BPN and the Ministry of Forestry (MoF) have clashed over authority to administer land that MoF claims is State Forest.

The Indonesian government has wide discretion to take land for public purposes, including supporting private business activities. While the government is supposed to pay compensation to those whose land they take, the amount paid is generally quite low and is unavailable to individuals without documented land rights. This situation makes customary land rights, which are generally afforded very weak recognition, especially vulnerable to government takings (Cotula & Mayers, 2009).

2.3.2 FOREST LAWS

The Indonesian Constitution gives the state control of all natural resources although it does not specifically refer to forests. Although only about 12 percent of the land in Indonesia is formally titled in the name of the MoF, the MoF has claimed that up to 70 percent of the country is State Forest.[47] The most important law governing forests and forestry is the Forestry Law of 1999 which establishes categories of forest use as well as types of forest rights.

Categories of Forest Use

There are four categories of forest use under Indonesian law: (1) Conversion Forest, forest areas that can be cleared for agriculture; (2) Protection Forest, forests with slopes exceeding 45 percent that are intended to maintain watersheds; (3) Production Forest, areas where timber can be exploited either in limited production or full production. Areas under limited production have harvest restrictions, while the full Production Forest can be fully exploited and cleared for tree plantations; and (4) Conservation Forest, areas in which all of the contents of the forests are protected. The forest estate is divided into these four categories as follows:

TABLE 2.1 FOREST ESTATE CATEGORIES

Forest Category	Percentage of Forest Estate
Conversion Forest	11%
Protection Forest	28%
Production Forest	44%
Conservation Forest	17%
Total	100%

Forest Rights

There are two basic categories of forests rights: (1) Forests with Rights (*hutan hak*), which are on private land and cover about 10 percent of forested areas; (2) State Forest, which includes all of the forest that is not Forests with Rights.[48]

There are several categories of State Forest, including Plantation Forest, Community Forest (*hutan kemasyarakatan*), Village Forest (*hutan desa*) and Adat Forest (*hutan adat*). **Plantation Forests** are primarily for timber harvesting and can be operated from an industrial scale down to a small, community scale pursuant to the People Plantation (*hutan tanaman rakyat*) tenure regime through which communities can engage in timber harvesting operations.

The **Community Forest** regime is a legal framework through which a local community group can access and exploit forest resources in Conservation Forest, Protection Forest, and Production Forest. A successful applicant receives a Community Forest utilization license that establishes the local community group as a

[47] Indrarto, Yetti interviews.
[48] Interview with Giorgio Budi Indrarto, Indonesian Center for Environmental Law (ICEL), January 25 2011.

cooperative and specifies the legal rights and responsibilities associated with their use of the zone designated as Community Forest. The activities permitted, mandated, or prohibited in the Community Forest are detailed in the utilization license. In Protection Forest, the license permits some access to and use of environmental services and the collection of non-timber forest products (NTFPs) such as rattan, bamboo, resin, tree bark, leaves, palm, sago, aloe, mangrove palm, and fruit and seeds. In Production Forest, the license also allows for timber utilization and collection (Government Regulation of Indonesia No. 6, 2007).

The utilization license does not afford ownership rights to the forest zone and prohibits user groups from transferring or changing their status. The license also requires that Community Forest users prepare a business plan for the duration of their license (35 years), establish the boundaries of the licensed area and engage in sustainable forest management.

TABLE 2.2 CATEGORIES OF FOREST RIGHTS

Type of Forest/Rights	Characteristics of Land	Comments
Forests with Rights	Privately held land	Covers about 10% of all forested areas
State Forest		
Plantation Forest	Primarily for timber harvesting	Can operate at small/ community to large/ industrial scale
Ecosystem Restoration Concession	Developer restores forests in degraded state Production Forest; 100 year term	Might be used to participate in carbon market
Community Forest (*hutan kemasyarakatan*	Local community group can form coop to exploit non-timber forest products resources in Conservation and Protection Forest, and timber resources in Production Forest	23 Community Forests formed in nine of Indonesia's 26 provinces, covering only about 65,000 ha.
Village Forest (*hutan desa)*	Designation gives village forest management body the right to benefit from environmental services and NTFP from a demarcated area for renewable periods of up to 100 years. Area must be free of all other land claims	Only 1 formed in Indonesia
Adat Forest (*hutan adat*)	Designation supposed to enable *adat* communities to manage State Forest.	MoF has never issued implementing regulations so none formed.

Relatively few Community Forests have been established, due in part to the difficulty and high cost of establishing them. As of October 2010, the MoF reported a total of 23 Community Forests in nine of Indonesia's 26 provinces, covering about 65,000 hectares. In some areas, Community Forest stewardship is limited by overlapping authority and poorly defined monitoring and evaluation criteria. However, stewardship

of forests under the Community Forest designation is the most advanced of the other community forest stewardship categories.[49]

Village Forests were authorized by the Forestry Law of 1999. However, the MoF did not enact implementing regulations until 2007. To obtain village forest rights, a village must form a village forest management body. This body is responsible for managing the designated forest area in cooperation with the local MoF officer as well as other local and provincial authorities. Village Forest designation gives the village the right to benefit from environmental services and NTFP from the demarcated area for renewable periods of up to 100 years. They can receive permission to harvest timber under a separate process. Importantly, the area must be free of all other land claims (Akiefnawati et al., 2010; IFCA, 2007).

To date, only one Village Forest has been established. It is located in Jambi Province, Sumatra and was certified in 2009. Setting up a Village Forest requires approvals at multiple levels of government, a process that is complex and time-consuming. Most officials and local communities know nothing about Village Forests or how to form them. In some quarters, the concept is controversial because it is a legal window through which to recognize community land rights, something that is rarely done in Indonesia.

In theory the **Adat Forest** designation enables *adat* communities to manage State Forest. The MoF is supposed to issue implementing regulations but has not done so. Reportedly, there has been some limited recognition of Adat Forest by local governments but not at the central level. Generally speaking, there is a process by which *adat* communities can be registered and become eligible to have a recognized right to manage an area of the forest. However, this process is very difficult and time consuming.

Another important type of forest right is the **Ecosystem Restoration Concession (ERC)**. Under an ERC, a developer, often a conservation NGO agrees to restore forests in degraded, state Production Forests. The concessions are for 100 years during which time no timber may be cut. The goal is to restore forest on the land.[50] ERC applicants do not appear to be required to consult with local residents of the proposed ERC area although they are required to "work with" local community cooperatives. The first approved ERC was established by Burung Indonesia and Birdlife International in Jambi, Sumatra (Government of Indonesia, 2008; Burung Indonesia, 2008; Birdlife International, 2010).

There are also commercially driven ERCs where a developer seeks to grow forests with the goal of entering the carbon market. The cost of forming an ERC is very high, equal to the cost of a commercial concession for the same area of land. Several partners are attempting to establish such a project in Rimba Raya, on the southern coast of Central Kalimantan province. Local communities in the area live adjacent to the restoration area but not inside of it. The communities should benefit from improved water quality for their fishing industry. It is not clear how, if at all, the communities will share in carbon revenues if the project generates any.[51]

Overlapping Concessions and the Need for "One Map"

Almost all of Indonesia's forestland has concessions on it. Most concessions are commercial but there are also a small number of community and ecosystem restoration concessions. In some places more than one commercial concession has been awarded for the same land. To make matters worse, concessions are often granted on land that is the subject of long-standing *adat* claims. In some cases, community opposition has

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[49] Interview with Ujjwal Pradhan, Regional Coordinator, and Beria Leimona, Associate Research Officer, World Agroforestry Centre, January 26 2011; Ratna Akiefnawati, et al. "Stewardship Agreements to Reduce Emissions from Deforestation and Degradation (REDD) in Indonesia at 4. ASB Partnership for the Tropical Forest Margins Policybrief 18. Nairobi 2010. Available online. URL: http://www.asb.cgiar.org/PDFwebdocs/ASB_18.pdf (hereinafter "ASB Policybrief 18"); Ministry of Forestry, Data Usaha dan Pemanfaatan Kawasan Hutan 2010.

[50] Interview of Taufiq Alimi, National Coordinator-Indonesia, Clinton Climate Initiative, January 27 2011.

[51] Alimi interview; Askham, Beth. "REDD Pilot Projects in Indonesia." Ecos Magazine. December 20 2010. Available online. URL: http://www.ecosmagazine.com/?paper=EC10048

caused failure of commercial operations.[52] Kuntoro Mangkusubroto, the head of Indonesia's President's Delivery Unit for Development Monitoring and Oversight and the REDD Task Force, has concisely acknowledged the problem with an example from Central Kalimantan:

> "There are overlaps of licenses within Forest Estate in Central Kalimantan. Four million hectares of Forest Estate, or 25% of the province has overlapping land use certificates that are in-process or have been issued. Some 3.1 million hectares of Forest Estate has overlapping regional government permits, with 560,000 hectares that also have licenses from Ministry of Forestry on top of its regional permits" (Mangkusubroto, 2011).

One of the causes of the overlapping concessions and unclear land forestland tenure generally is that the MoF and the National Land Agency (BPN) do not use the same map to determine forestland ownership and use rights. The two agencies have failed in their attempts to harmonize their maps despite a presidential mandate that they do so. Although only about 12 percent of the land in Indonesia is formally titled in the name of the MoF, the MoF has claimed that up to 70 percent of the country is State Forest.[53] There has been an unwritten agreement between BPN and MoF that the BAL does not apply to that 70 percent, even though the BAL is supposed to govern land registration and titling of all land in Indonesia.[54]

The government says it is committed to resolving these problems by taking two steps. First, they will create "One Map":

> "This One Map will be the one and only map used by all ministries and government institutions as the basis for decision-making. This integrated map should have robust definition and apply latest methods and techniques to identify the position and size of our forests, wall-to-wall, across Indonesia. Stakeholders, including indigenous communities, will be encouraged to provide input through a transparent and participative process."[55]

The second step will be to clarify rights to all of the Forest Estate:

> "Second, we must accelerate the enactment of Forest Estate…through community-based participatory mapping. Most Forest Estate is still in the designation phase, and only 14.2 million hectares or 12% has been enacted until now. Enactment of Forest Estate will identify private rights and it should be done in parallel with registry of *adat* customary land. Forestland use can only be done after enactment to guarantee *adat* customary rights are recognized."[56]

It is, of course, too soon to know whether these ambitious and important objectives will be achieved.

2.4 INDONESIA'S DEVELOPING REDD+ STRATEGY

Although there has been a great deal of activity, Indonesia has not yet decided how to implement REDD+ in a comprehensive way. The government has published a draft strategy document. It contains ambitious goals, including reducing emissions by 26 percent from business as usual by 2020 using domestic resources, and by 41 percent with the support of the international community.[57]

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52 Sunderlin, Indrarto interviews; interview of John Claussen, Managing Partner, Starling Resources, January 31 2011; interview of Y.I Ketut Deddy Muliastra, Forest Governance and Mapping Specialist, Sekala, January 31 2011.

53 Indrarto, Yetti interviews.

54 Rhee, Fay interviews.

55 Kuntoro speech.

56 Id.

57 Rhee, Yetti interviews; Interview with Andrew Wardell, Programme Director, Forests and Governance, CIFOR, January 26 2011; Government of Indonesia MoF. National Strategy: REDD-Indonesia; Readiness Phase 2009-2012 and Progress in Implementation. February 2010.

Indonesia is participating in the World Bank's Forest Carbon Partnership Facility (FCPF). The government submitted a Readiness Preparation Plan (R-PP) for funding approval in May 2009 and signed its grant agreement in June 2011. It was selected for financing by the Forest Investment Partnership (FIP) for the first round of pilot activity. Indonesia also participates in the UN-REDD Programme.

In 2009, Indonesia formed a National REDD Working Group under the auspices of the MoF. The government also established a National Council for Climate Change in the President's Office (Angelsen, 2009). More recently, the government created a Presidential REDD Task Force pursuant to the Norway-Indonesia REDD+ Partnership. Led by Kuntoro Mangkusubroto, the Task Force has many key and difficult responsibilities, among them: (1) bridging the policy differences between the MoF, Ministries of Finance and Environment and the BPN; (2) inducing the MoF and BPN to agree on a harmonized "One Map"; and (3) creating a REDD+ agency to take charge of implementing REDD+ in Indonesia.[58]

The Norway-Indonesia REDD+ Partnership is playing an important role in Indonesia's developing REDD+ strategy. In May 2010, the two countries signed a Letter of Intent (LOI) setting forth the basic terms of their agreement to cooperate on the development of REDD+ in Indonesia. In the LOI, Norway agreed to provide $1 billion in funding, payable over eight years upon fulfillment of various milestones. The initial payment was to support development of the REDD+ strategy. The second payment will be used to support the adoption of the forestry moratorium and the formation of two key institutions, one to administer the REDD+ program and one to monitor emissions. Thereafter, most payments are tied to verified emissions reductions. Central Kalimantan was selected as the pilot province under the LOI (Letter of Intent, 2010; Norway-Indonesia REDD+, 2010).

The LOI requires Indonesia to take "appropriate measures to address land tenure conflicts and compensation claims…from early 2011 onwards" (Letter of Intent, 2010, section VII[d] [iii]). This provision appears to signify that both governments believe that "insecure land tenure gives indigenous peoples and local communities little incentive to contribute to sustainable management of forest, especially when concessions for mining, logging, pulp and paper or palm oil plantations are awarded on land inhabited and used by indigenous peoples and local communities without recognition of traditional land rights and without compensation" (Norway-Indonesia REDD+, 2010).

Indonesia is also receiving major support on its REDD+ and climate change efforts from Australia under the Indonesia-Australia Forest Carbon Partnership (IAFCP). The partnership includes the $30 million Kalimantan Forests and Climate Partnership, which is a REDD+ pilot project in a degraded peat swamp in Central Kalimantan province on the former Mega-Rice Area. The second pilot project under IAFCP is likely to be on Sumatra.[59] USAID is active in Indonesia as well through the $40 million Indonesia Forestry and Climate Services Project which works on forest carbon issues in eight diverse landscapes across the country.

2.5 ENTITLEMENT TO RECEIVE REDD+ BENEFITS UNDER INDONESIAN LAW

2.5.1 REDD+ DECREES

In 2008 and 2009 Indonesia issued relatively comprehensive REDD+ decrees governing REDD+ demonstration and the first commercial projects (Ministry of Forestry Decrees 2008 2009). These decrees have been described as the "world's first national legal regime for the implementation of …REDD+ projects, and the issuance and trading of carbon credits in respect of the greenhouse gas reductions such projects generate" (Wilder et al., 2009).

[58] Interview with Alfred Nakatsuma, Aurelia Micko, Carey Yeager, Tony Djogo, Ben Stoner, Bill Rush, USAID Jakarta; Alimi interview.
[59] Interview of Timothy Jessup, Forest and Climate Specialist, Indonesia Australia Forest Carbon Partnership, 29 January 2011.

There are three primary provisions. The first establishes permission and approval procedures for REDD+ demonstration activities so as "to test and develop methodologies, technology and institution of sustainable forest management that endeavor to reduce carbon emission through controlling forest deforestation and degradation" (Government of Indonesia, 2008a, Reg. Ch. II, Article 2(1)).

The second decree establishes procedures and requirements that REDD+ project developers must comply with, including verification and certification, types of forest areas where projects can be established and standards and requirements to be met by implementing bodies. The decree authorizes demonstration activities and voluntary carbon trading prior to final determination of an international REDD+ regime. Various categories of forest rights holders expressly receive an entitlement to participate in REDD+ projects in partnership with an international entity. Rather than address revenue sharing, the decree explicitly defers the issue to a regulation to be adopted later (Government of Indonesia, 2009, Articles 4 20(1) and 22(1)).

The third decree sets forth procedures for licensing commercial carbon sequestration projects in Production and Protection Forests. It defines specific carbon sequestration activities. The decree also covers approvals for those with and without pre-existing licenses for various forestland uses, including environmental services, ecosystem restoration services and timber production in different types of forests. The decree includes required revenue sharing allocation percentages for each forest rights category (Government of Indonesia, 2009a, paragraph 3 and Attachment III)). The Ministry of Finance has challenged the authority of the Ministry of Forestry to regulate revenue distribution. As a result, there is considerable doubt as to whether this decree will take effect.

All in all, the decrees establish an approval process and governing rules for projects in different types of forestland categories. Indonesian entities or individuals already holding secure legal rights to those lands are given the right to collaborate with international entities to develop REDD+ projects. While the decrees contemplate some payments to "local communities" they do not make clear who the "local community" is for purposes of payments or assignment of rights nor do they contain a requirement that a developer consult with a local community, let alone obtain their consent.

2.5.2 REDD+ DECREES UNDER LAND AND FOREST LAWS

For those who have secure rights to forestlands where REDD+ projects will be located, the decrees, if legally approved and fully implemented, would appear to create a legal entitlement to REDD+ benefits derived from those projects, which in this case would include entitlement to a proportion of the finance from carbon credit sales.[60] However, rights to use forest resources in Indonesia are often highly contested so it is unclear how many rights holders will actually qualify. Certainly one can predict with a high level of confidence that local communities and indigenous peoples are unlikely to be among them (Costenbader, 2009) since "the regulations are all based on Indonesia's 1999 Forestry Law, which fails to provide for indigenous ownership of forests within the 'state forest zone', an area that amounts to some 70 percent of Indonesia's total land area" (Lang, 2009). Under the decrees, forestland that is not subject to an established land right is not eligible for a REDD+ project (Wilder et al., 2009). Thus, the decrees would appear to have little effect in the absence of clear underlying rights to forestland and resources.

The Indonesian government recognized the problem of land tenure conflicts in the LOI with Norway when it agreed to "take appropriate measures to address land tenure conflicts and compensation claims" (Letter of Intent 2010). However, there is no indication yet as to what Indonesia intends to do to resolve this complex, longstanding problem. The REDD+ regulations do nothing to clarify the underlying problems of lack of tenure clarity, especially on behalf of local and indigenous communities.

[60] Interestingly, none of the individuals interviewed during the field study cited these regulations as creating carbon rights.

Several of those interviewed in the field study suggested that the Village Forest (*hutan desa*) mechanism could be a successful vehicle for providing more secure rights to forestland to local communities.[61] For several reasons, it is difficult to discern how this action is workable in the near term. First, Village Forests are very difficult to establish, as evidenced by the fact that there is only one in the entire country. Second, a Village Forest can only be established in an area that is entirely free of all other claims. Given the prevalence of overlapping concessions and land claims this requirement will likely be difficult to satisfy in most cases.[62] Third, the areas covered by Village Forests are likely to be small, which could mean that REDD+ transaction costs are too high. Finally, there is little political support for this mechanism.[63]

Community Forests are another option. Some districts are considering using this mechanism. Similar to Village Forests, however, the forest areas covered by community forests may be too small to garner government support due to the high costs of forming and administering them as part of a REDD+ system. Finding forestland that is free of any other claims will be difficult.[64]

Overall, Indonesia combines unclear land and forest tenure with an overlay of laws that do not conclusively establish the rights and duties of the various levels of government over forest management (Takacs, 2009). Indigenous communities and local governments have no obvious legal entitlement to forest resources that would form a basis for an entitlement to REDD+ benefits under the rather unclear provisions contained in the REDD+ regulations. The "legal framework that enables sustainable forest carbon projects is still under construction" (Takacs, 2009).

2.6 REDD+ BENEFIT DISTRIBUTION

Indonesia has yet to settle upon an overall national plan for REDD+ benefit distribution and there is no clear national vision of how benefit sharing will unfold.[65]

The REDD+ decrees may provide a clue as to how Indonesia will proceed, although there are reports that the President's office may be reconsidering the benefit-sharing allocation (Askham, 2010). The 2009 Ministry of Forestry decree[66] sets the following guidelines for benefit sharing:

TABLE 2.3: REDD+ BENEFIT DISTRIBUTION

Permit Holder	Government %	Community %	Developer%
IUPHHK-HA (Wood Use License For Natural Forest)	20	20	60
IUPHHK-HT (Wood Use License for Plantation Forest)	20	20	60
IUPHHK-RE (Wood Use License for Ecosystem Restoration Area)	20	20	60
IUPHHK-HTR (Wood Use License for People's Plantation Forest)	20	50	30
Community Forest	10	70	20
Hutan Kemasyarakatan[67]	20	50	30

61 Rhee, Fay, Yetti and Jessup interviews.
62 Sunderlin interview.
63 Sunderlin interview; Leimona and Pradhan interview.
64 Interview of Dr. Gotz Martin, McKinsey & Company, Jakarta, February 1 2011
65 Wardell interview.
66 (Government of Indonesia 2009a, Attachment III.
67 Available research sources state that "Community Forest" and "*Hutan Kemasyarakatan*" are the same. The authors were unable to determine why they are listed separately and entail different benefit allocations.

Permit Holder	Government %	Community %	Developer%
Adat Forest	10	70	20
Village Forest	20	50	30
KPH (Forest Management Unit)	30	20	50
KHDTK (Special Purpose Forest Area)	50	20	30
Protection Forest	50	20	30

Permit holders have rights over various types of forest areas on which REDD+ projects can be located. While contemplating payments to a "community," the benefit-sharing provisions do not make clear who the "community" is for purposes of payments or assignment of rights. The central government is to receive 40 percent of the "Government's" share, which ranges from 10-50 percent depending on the category of permit holder, with the remainder divided equally among the provincial, district and local government units (Ministry of Forestry Decree, 2009).

There are a number of REDD+ pilot projects underway or in the planning stages. Generally speaking, the pilot projects do not appear to be contemplating payments to households. Rather, all seem likely to share benefits in the form of payments to communities or in the form of funding to build schools, clinics or other infrastructure (Askham, 2010).

2.6.1 KALIMANTAN FOREST CARBON PARTNERSHIP (KFCP) PILOT

One of the most prominent pilots is the project being implemented by the Kalimantan Forest Carbon Partnership (KFCP) in Central Kalimantan. It is located on a 120,000 hectare swathe of peat swamp forest and degraded peat land in an area known as the Ex-Mega-Rice Area. The project aims to preserve vast quantities of carbon stored in the peat soil and forests and reduce emissions by keeping water levels in the swamp high enough to keep the peat wet (which prevents carbon leakage from fires) and maintain the health of the existing forest. The area is now Production Forest but will be converted to Protection Forest (Galudra et al., 2010; Australia Indonesia Partnership, 2010).

Project developers are working with communities that live on the borders of the site. Communities will receive performance-based payments for various activities that support the project. In the initial phase, the emphasis is on a livelihoods program that is trying to improve rubber farming productivity and revenues. They also plan to provide payments for project work, such as rehabilitating canals necessary to keep the soil moist. Ultimately, project planners hope to be able to make payments linked to measurable emissions reductions. They will explore the possibility of converting the area to Community Forest (Australia Indonesia Partnership, 2010).

The KFCP project is attempting to support the development of village-level institutions that can efficiently and effectively manage and distribute benefits. They are using village facilitators to work with local communities. The facilitators explain activities, oversee trainers and help to set up community leadership groups to represent the communities and manage activities. Ultimately, KFCP wants the communities to make their own decisions about how to spend the money from payments for REDD+ activities.[68]

The KFCP project is controversial. It has been challenged on technical grounds and criticized for not obtaining the consent of indigenous peoples in the area. Some maintain that the developers have raised community expectations by making claims about unreasonably high levels of benefits (Lang, 2011a; Lang, 2011b; Bernadinus interview).

[68] Jessup interview.

Benefit-sharing lessons and implications from two other projects visited by the team are described in the companion case studies on benefit distribution in REDD+ activities.

2.7 SOCIAL AND ENVIRONMENTAL IMPACTS ON FOREST-DEPENDENT COMMUNITIES

It is too early to predict the social and environmental impacts of REDD+ on forest-dependent communities. There are very real concerns that "REDD+ schemes will exacerbate inequitable access to natural resources, increase opportunities for corruption and reverse recent efforts toward local control over natural resources" (Neilson, 2010).

As explained above, the land rights of indigenous people are practically unrecognized in Indonesia. There are claims that indigenous people have not been consulted or given the opportunity to reject pilot projects to be situated on forestland where they live and to which they assert land rights. Some organizations "have expressed concern that REDD+ could further marginalize forest-dependent people and those with customary rights. Large-scale land acquisition remains a threat to smallholders with no formal legality" (Angelsen, 2009; see also Neilson, 2010). These are very real concerns.

The impact of REDD+ on women is similarly uncertain. The strength of women's land rights varies widely across Indonesia. On Java, for example, a significant percentage of land titles are in the name of women. Whether women have customary land rights also depends on the location (USAID, 2011b). In many cases, women in forested communities tend to have little authority in the household. Women have not participated meaningfully in REDD+ consultations in Indonesia. Few women, especially indigenous women, are involved in REDD+ design or implementation (Lang, 2011c).

As in other countries, there are also significant threats of corruption and capture of benefits by local elites. "[L]ocal control over forests is not automatically a panacea that leads to sustainable forest carbon investments. Local control has sometimes meant that local elites arrogate the resources; local control hasn't necessarily meant that local officials are more democratically accountable to local people, are less corrupt, or have the resources or experience to perform their duties adequately. Observers note, "in the field there is often no 'rule of law' in the formal sense, leading to conflict of interest and conflict of authority especially with regard to forest exploitation" (Takacs, 2009).

2.8 WILL DISTRIBUTION OF REDD+ BENEFITS INCENTIVIZE THE DESIRED LAND USE BEHAVIOR?

It is difficult to predict whether REDD+ benefits will be sufficient to incentivize substantial changes in land use in Indonesia. The enormous revenues generated by the pulp and paper and palm oil industries in Indonesia suggest huge opportunity costs for large scale implementation of REDD+. The $1 billion the government will receive from Norway pales in comparison to annual government revenues from palm oil, pulp and paper and mining concessions.[69] It is not immediately obvious that REDD+ benefits will be large enough to combat the primary drivers of deforestation, demand for timber, illegal logging, land conversion and mining, that are so economically valuable.

Perhaps more fundamentally, much of the most desirable forestland is already burdened by concessions where the government has sold the right to engage in various economic activities.[70] It is not clear that there is sufficient forestland remaining without concessions to achieve the level of emissions reductions sought by the government and the international community. If not, REDD+ revenues will have to be large enough to

[69] Rhee interview.
[70] Sunderlin interview; Claussen interview.

incentivize the existing concession holders to adopt forest-friendly practices in lieu of harvesting timber, palm oil production or mining activities.

2.9 SUGGESTED CHANGES IN LAW AND PRACTICE

The land tenure situation in Indonesia has not changed for twenty years. According to one observer, many government officials are in denial; they don't understand how bad the problem is.[71] Thus, by far the most important task for Indonesia is to take meaningful steps to clarify forestland tenure.

Fundamental problems require fundamental solutions. It is difficult to make meaningful decisions about carbon rights or benefit-sharing if the larger problems of overlapping concessions and unclear tenure are not resolved, however long that may take.

The first step, as many others have suggested, is for Indonesia to enact legislation that more strongly recognizes the customary land rights of *adat* communities under the BAL. This can be done either by amending the BAL or adopting an entirely new law. Second, the primacy of the BAL over the Forestry Law should be recognized and enforced so that the BAL governs forestland in practice as well as by law. The plain language and intent of the law needs to be recognized and enforced. This, combined with stronger recognition of customary rights, will place local forest communities in a better position to create formally recognized *adat* forests, thus qualifying them for the 70 percent share of the revenues obtained from REDD+ projects established in their forests (assuming the REDD+ revenue-sharing decree is legally approved and for as long as it remains in effect).

Third, the "One Map" advocated by the REDD+ Task Force should be completed in conjunction with community-based participatory mapping process that identifies all rights, including *adat* customary rights to Indonesia's land and forests. This approach will enable all stakeholders to know and agree upon the position and size of the forest and could be the first step in resolving conflicting claims to forest land.

If Indonesia does not resolve these overriding problems, "carbon investments may be plagued with competing claims for who, in fact, is legally entitled to contract for a given piece of land. These are potential clashes between central and regional governments; between regional governments and communities who may believe they have claims based on tradition and history to a piece of land, even if that claim is not recognized by the formal legal structure; and between local communities with competing claims on a forest…. However, the rights of local communities over their forests (not to mention any prospective carbon rights) are not legally obvious. The government lays claim to most commercial forests, and even when local communities claim property rights, the process by which these would be recognized, or which rights would accrue, is not clear" (Takacs, 2009).

In the LOI with Norway, Indonesia agreed to "take appropriate measures to address land tenure conflicts and compensation claims" (Letter of Intent, 2010, para. VII [c] [4]). Translating that promise into action is Indonesia's challenge.

[71] Rhee and Fay interview; Sunderlin interview.

INDONESIA CASE STUDY ANNEX A: LIST OF INTERVIEWS

Type of Organization	Organization Name	Contacts Interviewed & Title
Government	Ministry of Forestry	Dr. Ir. Hadi S. Pasaribu, Senior Advisor for Economic Affairs and International Trade
	Ministry of Forestry	Dr. Yetti Rusli, Senior Advisor to the Minister of Forestry
	Clinton Climate Initiative	Taufiq Alimi, National Coordinator-Indonesia
Local Government	Ministry of Forestry	Cucu Suryadi, District forest ranger
Village Government	Mantaya Sabrang	Samsudin Molano, Head of Village
	Mantaya Sabrang	Syamsu Usman, Village Elder
	Mantaya Sabrang	Murnia, Head of Free, Prior and Informed Consent (FPIC) group
	Mantaya Sabrang	Saifull Anwar, Village Facilitator
	HKM Forum	10 representatives
	HKM Forum	Eddy Perwanto, Forum Coordinator
	HKM Forum	Darsono, Head of Buluh Kapur HKM Group
Local Civil Society	Indonesian Center for Environmental Law (ICEL)	Giorgio Budi Indrarto
	Association for Community and Ecologically-Based Law Reform (HuMa)	Steni Bernadinus
	Sekala	Y.I Ketut Deddy Muliastra, Forest Governance and Mapping Specialist
International Institutions	CIFOR	William Sunderlin, Principal Scientist-Climate Change Forests and Governance Programme
	CIFOR	Andrew Wardell, Programme Director, Forests and Governance
	World Agroforestry Centre	Ujjwal Pradhan, Regional Coordinator, & Beria Leimona, Associate Research Officer
	World Bank	Tim Brown, Mubariq Ahmad, Emile Jurgens, Olivia Tanujaya
	ICRAF, RUPES project coordinator	Chandra Wijaya
Bilateral Agencies	USAID Jakarta	Alfred Nakatsuma, Aurelia Micko, Carey Yeager, Tony Djogo, Ben Stoner, Bill Rush

	Forest and Climate Specialist, IAFCP (Indonesia Australia Forest Carbon Partnership)	Timothy Jessup
	Kemitraan Partnership	Avi Mahaningtyas, Chief of Economic and Environmental Cluster, and Farah Sofa, Program Manager Sustainable Development
International NGOs	Ford Foundation	Steve Rhee, Program Officer
	ClimateWorks Foundation	Chip Fay, Programme Coordinator
	WRI	Moray McLeish, Rauf Prasodjo
	The Nature Conservancy	Erin Myers Madeira, Senior Advisor, Forest Carbon Climate Change Team
Private Firms	Starling Resources	John Claussen, Managing Partner and Rumi Naito, Associate
	McKinsey & Company	Dr. Gotz Martin
	Starling Resources	Rezal Kusumaatmadja, Partner
	PLTA Way Besai (hydropower company), CSR Director	Representative

3.0 NEPAL

3.1 STUDY OVERVIEW

Field visit: Darryl Vhugen and Jonathan Miner of Landesa and Crystal Davis of WRI visited Nepal from 26 April to 7 May 2011 to gather information for the case study. The team conducted interviews in Kathmandu, Chitwan and Gorkha. In both Chitwan and Gorkha the team was able to meet with the local REDD+ Networks engaged in piloting efforts.

3.2 BACKGROUND

Nepal is divided into four general geographic regions. They are: the lowland, sub-tropical Terai; the middle mountains; the high mountains; and the snow-bound Himalayas (Acharya et al., 2009). Forest covers about forty percent of Nepal's total land area. Of the forested regions, about 3.6 million hectares or 29 percent of Nepal's total land is dense forest, and about eleven percent is shrub-land. Forests in the Terai area have been declining rapidly, whereas forests in the mid-hills have been under community based forest management programs for several decades, and are experiencing reforestation.

By far the largest portion of Nepal's forests, 63 percent are managed by the Government (Nepal Readiness Preparation Proposal [R-PP], 2010). Forested area managed by Community Forest User Groups (CFUGs) represents the next biggest area, at about 21 to 25 percent of Nepal's forests, with membership that includes between 35-50 percent of Nepal's population.[72] A further 15 percent of the forest falls within protected areas, such as national parks, reserves, conservation areas[73] and negligible amounts of forestland fall into leasehold and collaborative forests (Nepal R-PP, 2010).

TABLE 3.1: NEPAL'S FOREST MANAGEMENT

Forest Type	Percent Coverage
Government Managed	63%
Managed by Community Forestry User Groups	22%
Protected Areas	15%

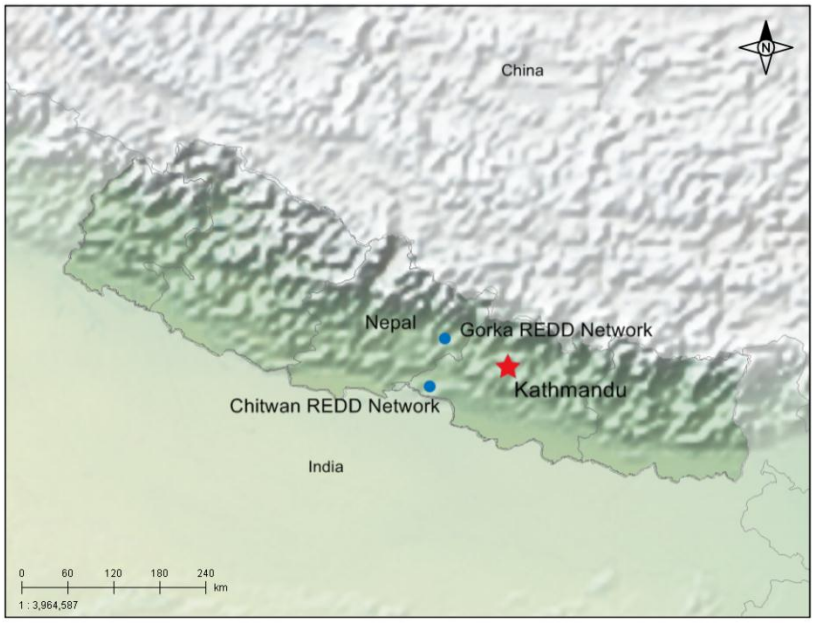
Over the past 30 years Nepal's overall rate of deforestation has been extremely high, at roughly 2 percent per annum. Drivers of deforestation in Nepal vary across the geographic regions and the different management regimes. The Terai faces high demand for timber products, high population pressures, political instability, lawlessness, insecurity, poverty, weak governance and landlessness. In the middle-mountains, the high prevalence of CFUGs has effectively slowed deforestation. In the remaining state land, lack of effective funding to support and train forestry employees, as well as weak law enforcement and institutions have led to poor forest protection.

[72] Interview with Peter Branney, Program Advisor, and Ramu Subedi, Deputy Programme Manager at Livelihoods and Forestry Programme on May 6 2011. See also Nepal R-PP at pg. 36 and Ready for REDD at pg. 24.

[73] Information from Dr. Dil Raj Khanal of FECOFUN on August 3 2011.

Much of Nepal's rural population, especial in the middle and high mountains is still heavily dependent on forest products for subsistence purposes. Although deforestation has slowed in these areas, forest degradation is still a factor. Drivers of forest degradation are "excessive use of timber for house shingles or hut (*goth*) construction, fuel-wood consumption and smuggling of timber to Tibet, as well as heavy lopping of trees for livestock fodder, and firing to induce a flush of green grass for livestock" (Nepal R-PP, 2010).

FIGURE 3.1: MAP OF NEPAL AND LOCATIONS VISITED FOR REDD+ INTERVIEWS



3.3 NEPAL'S LAND AND FOREST LAW

3.3.1 LAND LAW[74]

Nepal is in the process of revising its legal framework governing land rights. While the target timeline for the land reforms was 2011, as of early 2012 it appears that Nepal's Land Commission has yet to provide recommendations, and finalization of land laws will likely be delayed.[75] It is expected that the new legal framework will be governed by principles set forth in the 2007 Interim Constitution, the 2006 Comprehensive Peace Accord, the 2008 Common Minimum Program of the National Consensus Government, and the Ministry of Land Reform and Management's Three Year Interim Plan (USAID 2011c). Land rights and land access in Nepal is a critical issue, since currently over 24 percent of the population is considered to be landless (Human Development Report of Nepal, 2004).

The Interim Constitution of Nepal, which became effective in 2007, grants every citizen the right to acquire, own, sell and otherwise dispose of property. The Comprehensive Peace Agreement, signed by Nepal's Prime Minister and the Chairman of the Communist Party of Nepal (Maoist) in 2006, calls for the: (1) nationalization of forests, conservation areas, and other lands that Nepal's monarchies had controlled; (2) the

[74] For a more complete discussion of Nepal's land laws see USAID 2011. Country Profile: Nepal URL: http://usaidlandtenure.net/usaidltprproducts/country-profiles/nepal/nepal-country-profile (accessed June 4 2011).

[75] Interview with Dr. Bill Paterson and Netra Sharma of USAID (April 28 2011).

end of feudal land ownership, establishment of a Land Reform Commission and adoption of a program of scientific land reform; (3) adoption of policies to provide land to landless and disadvantaged groups; (4) prevention of the ability to obtain land through corruption within government offices; (5) support for Internally Displaced Persons (IDPs); (6) prohibition against illegal seizure of private property; and (7) support for principles of nondiscrimination.

Land in Nepal is classified as: (1) private land; (2) *guthi* land; and (3) state land. Nepal recognizes two private land tenure types: ownership and leasehold. About 27 percent of the country's land is privately held. Landowners have rights to exclusivity and use of their land. Landowners can freely transfer their land and pass the land by inheritance. An estimated 10 percent of rural households are registered as tenants under the Land Act of 1964. The actual numbers of households renting land is believed to be three times that amount. *Guthi* land is land held by religious bodies for religious or philanthropic purposes and is not subject to taxation, such as temples, schools and hospitals. It accounts for only 0.03 percent of land in Nepal.

TABLE 3.2: LAND CLASSIFICATIONS IN NEPAL

Land Distribution	Percent Cover
State-owned	73%
Privately-owned (including leasehold)	27%
Guthi	.03%

By far the largest category of land in Nepal is state land, estimated to be 73 percent of the total area. State land includes public land (defined to include wells, ponds, pathways, grazing land, cemeteries, market areas, etc.) and government land (defined to include roads, government offices, and land under government control, such as forests, lakes, rivers, canals, and barren land, etc.). Forestland under CFUG management also falls in the category of state land. The vast majority of Nepal's forests fall within the government land classification.

3.3.2 FOREST LAWS

The Forest Act 1993 (2049 BS) classifies forest as either private forest or national forest. Private forests are forests that are planted, nurtured, or conserved on private land owned by an individual pursuant to prevailing law. All other forests are national forests. Only about 2 percent of Nepal's forests are on private land.[76]

The Forest Act identifies five types or modalities of national forest:

1. Government managed forest is forestland managed by the state. Ownership of all forest products of government managed forest is vested in the government, although the government may grant a license for the use of such products.

2. Protected forest is forest that the state has designated as having special environmental, scientific, or cultural importance.

3. Community forest is forest that the state hands over or transfers to a Community Forest User Group (CFUG) for development, conservation, and utilization in the collective interest. The state retains ownership of the forestland but the CFUG is given user rights that can in theory be perpetual, so long as the community meets certain standards.[77]

[76] Interview with Bibek Chapagain (Director) and Nira Bhatta (Program Associate) at Winrock International on May 5 2011.
[77] Interview with Krishna Prasad Acharya, Director General of Department of National Parks and Wildlife Conservation an April 30 2011.

4. Leasehold forest is forest that the state grants to individuals or entities to (a) produce raw materials required for industry; (b) sell, distribute or use forest products by promoting production for afforestation; (c) operate tourism in a manner compatible with conservation and development of the forest; (d) operate agroforestry; and (e) operate insect farms. Leaseholds are granted for 40-year terms and it can be renewed for additional 40 year terms.

5. Religious forest is forest transferred to a religious body, groups, or community for development, conservation, and utilization. The state retains ownership of the religious forestland and has the power to reclaim the land (USAID, 2011c).

The Forest Act broadly defines forests to include all forest areas, including wasteland and uncultivated lands surrounding and adjoining forests, and all rivers and streams within forests. The state has the authority to designate for protection any part of a national forest with special environmental, cultural or scientific significance. The Forest Act also gives the state the authority to transfer some degree of management of forests to sanctioned users, including the CFUGs, in order to protect forest from overuse and to rehabilitate degraded sections of the forest. Nepal's Forest Regulations 1995 (2051 BS) set additional standards for the operation of government-managed forests, protected forests, and community forests.

3.3.3 THE LEGAL STRUCTURE OF COMMUNITY FOREST USER GROUPS

The legal framework governing forests has favored the formation of community-based forestry management, predominantly through CFUGs. These groups are given potentially permanent use-rights to forest areas, but the state retains ownership of the land and substantial influence over forest uses and the benefits derived from forest management. The District Forest Office (DFO) has the power to designate potential Community Forest areas. Within some districts that have begun to implement collaborative forest policy, the DFO has set up District Forest Coordination Committees (DFCCs) which determines the different modalities of forest uses that will be allowed.[78] In these districts, new CFUGs can only be formed where forest land has been previously designated as eligible for community forestry by the DFO or DFCC. In areas where DFCCs have not been set up, the actual approval of new CFUGs takes place at the local level through District Forest Officers.

Once a CFUG is formed, the 1995 Forest Regulations limit the user group to collecting, selling, and distributing of forest products only in accordance with an approved operation plan.[79] The Regulations also prohibit certain activities, such as clearing land for agriculture, destroying the forest, transferring or mortgaging the land, and building huts and houses. The DFO is authorized to enforce these regulations, both through physical inspection of CFUG operations and also through direct approval of CFUG operation plans. The operation plans are generally renewed every 5 years, though this process is not established in the regulations.[80]

The Regional Forest Directorate, through the DFO approves forest access and has the right to cancel access and use-rights if a CFUG is not conforming to the forestry regulations. The Forest Act provides:

> "In case the User Group cannot operate its functions in accordance with the work plan in the Community Forest handed over pursuant to Section 25 or operates any functions which may cause significant adverse effect in the environment or does not comply with the terms and conditions to be complied pursuant to this Act or the Rules made thereunder, the District Forest Officer, may decide to cancel the registration of such Users' Group and take back such Community Forest As Prescribed. Provided that, such Users' Group shall be given reasonable

[78] Interview with Ram Nandan Sah, Undersecretary, Department of Forestry on May 6 2011.
[79] Interview with Jeeban Thakur, District Forest Officer – Chitwan, on May 1 2011.
[80] Interview with Bhishma P. Subedi, Executive Director of Asia Network for Sustainable Agriculture and Bioreserouces (ANSAB) on May 6 2011; and Krishna P. Acharya Interview.

time to submit its clarification before making decision to cancel the registration of the User's Group and take back the Community Forest" (Forest Act 2049, 1993, Chpt.5, Section 27[1]).

These requirements that dissolution only occur where a CFUG is abusing its forest use rights would appear to give them some security from the potential for arbitrary government decisions to retake the land. However, the Act does not provide a robust mechanism for a CFUG to appeal an adverse decision. For example, "the User Group which is not satisfied with the decision made by the District Forest Officer pursuant to sub-section (1), may file a complaint to the Regional Forest Director as prescribed. The decision made by the Regional Forest Director in respect to such complaint shall be final" (Forest Act 2049, 1993, Chpt.5, Section 27[2]). Since the only appeal mechanism available is to a higher official within the Forest Office the CFUGs have little independent legal protection from arbitrary loss of their forest land.

Though there is little robust legal protection for CFUGs, interviewees expressed a belief that the CFUGs had sufficient political power and importance that this risk of arbitrary governmental retaking of CFUG land is not a real concern. Peter Branney and Ramu Subedi at DFID's Livelihoods and Forestry Program asserted that since nearly 50 percent of Nepal's rural population belonged to a CFUG it is politically impossible for the government to aggressively dissolve CFUGs without triggering protests and political turmoil.[81] None of the interviewees asked about this issue reported that any CFUGs had actually ever been dissolved after formation. Dil Raj Khanal of FECOFUN, a national organization that represents the interests of many of the CFUGs, reported knowing of only one instance where a CFUG came close to being dissolved.[82] Nonetheless, even if the risk is low at this time, political changes in the future could cause this to become a risk area.

3.3.4 THE FORESTRY SECTOR POLICY OF 2000 AND COLLABORATIVE FORESTRY

The government revised its forest policy in 2000. The Forestry Sector Policy of 2000 proposed that a system of "collaborative forest management" (CFM) be established in the Terai region in order to try to relieve some of the pressure on the forests located in that region. The Forest Policy itself does little more than mention the term, but it was somewhat more developed by a CFM Directive in 2003 which defined the mechanism as: "management of government owned forests in collaboration with His Majesty's Government and stakeholders in consonance with the approved forest management plan for the livelihood and achievement of multipurpose benefit including economic benefits maintaining ecological balance of the forest." (Brampton et al., 2007, p. 33).

The general approach is for the government and those living in the vicinity of the Terai forests to collaborate in managing those forests (Forestry Sector Policy 2000). There are four objectives to: (1) meet demand for forest products; (2) create employment to assist in reducing poverty; (3) enhance biodiversity; and (4) actively manage the Terai forests in order to increase income from forest products to both local communities and the national government (Paudyal, 2007).

The Forest Act 1993 has no specific provision authorizing the collaborative forest management model. Rather, the Ministry of Forests and Soil Conservation (MoFSC) has claimed authorization for the development of its CFM model under its authority to prepare plans for the management of national forests (Brampton et al., 2007). CFM has not been widely implemented yet, and the lack of clear legal or regulatory provisions make it hard to analyze. However, from the few CFM schemes that have been implemented, it appears that the mechanism includes the following key components: (1) it is used in Government Managed Forests; (2) DFCCs decide where to implement the projects; (3) the schemes are overseen by a Community Forestry Group (CFG) consisting of representatives of local government, NGOs and the District Forest Officer's office; (4) forest users from near the forest (within 5 kilometers) and further away are represented; (5) 75 percent of the revenue from the sale of forest products goes to the central government and 25 percent

[81] Peter Branney and Ramu Subedi Interview.
[82] Interview with Dr. Dil Raj Khanal of FECOFUN on May 4 2011, who reported only one instance where a CFUG came close to being dissolved.

to the CFG and local governments; and (6) "near" users may collect non-timber forest products and "far" users have forest access rights and are likely to be involved in the authorized sale of forest products (Paudyal 2007).

It is important to note that CFM is envisioned as a scheme to achieve more optimal forest management of government forests by engaging local populations; however it is dramatically different from the CFUG structure. In CFUGs, the community gains a high degree of control over the forest, with the central government retaining only the ownership of the land. Under CFM the local community is only one of several stakeholders represented in the Collaborative Forestry Group. With respect to revenue, under the CFUG model the central government does not receive revenues from either the land or from forest products that come off the land, but under CFM, the local community looks to receive very little of the revenue, with the central government receiving 75 percent, and the local government and CFG sharing the remaining 25 percent.

3.4 NEPAL'S DEVELOPING REDD+ STRATEGY

Nepal is participating in the World Bank's Forest Carbon Partnership Facility (FCPF) and submitted a revised R-PP for funding approval in October 2010.[83] Nepal is also receiving funding from the Norwegian Agency for Development Cooperation (NORAD). Other donors (UK, Finland and Japan) are also committed to provide support for REDD+ readiness in Nepal through a Multi-stakeholder Forestry Program.

Nepal's designated authority for the UNFCCC process is the Ministry of Environment.[84] REDD+ governance is being led by the Ministry of Forests and Soil Conservation (MoFSC), which has put in place a three-tiered structure to manage the national readiness process. The Apex body provides inter-ministerial guidance for overall REDD+ coordination and will be responsible for approving REDD+ strategies. Under the Apex body, the REDD+ working group consists of 12 representatives from government, civil society and the donor community. The working group takes input from a Stakeholder's Forum and is also responsible for preparing Nepal's REDD+ Strategy. The Stakeholder's Forum is comprised of representatives of government, NGOs, donors, the private sector, community-based organizations other stakeholders interested in the REDD+ process (Nepal R-PP, 2010). The third tier is the REDD Cell, located in the MoFSC, having responsibility to actually undertake Nepal's REDD+ readiness activities.

The 2010 R-PP calls for a National REDD+ Strategy to be formulated based on lessons learned through a three year preparation plan that will implement activities aimed at gathering information on the value of Nepal's forests, the political economy of land use and drivers of deforestation and degradation (Nepal R-PP, 2010).

The NORAD-funded REDD+ pilot projects are intended to assist with this process of information gathering for Nepal's future REDD+ strategy. These are NGO and civil society projects, rather than government projects, but the lessons learned from the piloting are intended to feed into the government's continuing REDD+ preparation process. The primary NORAD pilot project on REDD+ payments is now functional in three watersheds. In each, a REDD Network has formed to coordinate activities including wood-fuel alternative programs, forest preservation and planting, and carbon sequestration and emissions reduction measurements. Recently the pilot project has rewarded/distributed payments (US$ 90,000) to CFUGs of these three watershed areas for carbon sequestration. Another aspect of NORAD's effort is the preparation of materials on REDD+ to be used for capacity building in nine districts.

At this time, it seems the formulation of the next step in Nepal's REDD+ Strategy has slowed. An interim version of Nepal's REDD+ strategy has been circulated, but it is apparent that the interim strategy does not

[83] Nepal's R-PP and Updates on Nepal's status within the FCPF can be accessed at http://www.forestcarbonpartnership.org/fcp/node/75.

[84] See UNFCCC Clean Development Mechanism, list of designated national authorities. Available at http://cdm.unfccc.int/DNA/index.html?click=dna_forum.

have the support of all important stakeholders.[85] When asked about Nepal's strategy now that the R-PP is approved, the members of the REDD Cell expressed a need to get input from a wider set of stakeholder groups and then to craft a strategy based around nine particular drivers of deforestation that had been identified in the R-PP.[86] It seems likely that the government will form a central clearinghouse that would be empowered to enter into carbon transactions with outside investors and maintain a central carbon registry. How this clearinghouse would be structured or managed is yet to be determined (Nepal R-PP, 2010). Regarding actual payments, Nepal's R-PP identified a "risk of fungibility if funds are routed through central government channels where competing development needs could lead to a diversion of REDD+ payments to other activities" (Nepal R-PP, 2010, p. 49). In order to avoid this risk the R-PP suggests the formation of a national trust fund, managed by a multi-stakeholder board. A national level trust fund is yet to be established, but interviewees indicated that this was still a preferred solution to managing REDD+ funds.[87] Piloting of a trust fund is also going forward through the Forest Carbon Trust Fund which will be distributing REDD+ seed money to the three NORAD pilot projects.[88]

In order for Nepal to successfully reduce its overall rate of deforestation it will be crucial for the REDD+ strategy to effectively deal with deforestation in the Terai where deforestation rates are higher and where the CFUG model has not been broadly implemented. From interviews with the REDD Cell and members of the MoFSC, it seems that the preferred approach will be to expand collaborative forestry efforts. It may be that this preference is due to the fact that collaborative forest management arrangements allow the MoFSC to retain greater control over the forests and also continue to generate and collect revenue from forest products, whereas under CFUGs such control and revenue disappears. As of this study there are very few collaborative forestry programs implemented. Whether this model will be successful in promoting forest conservation in the Terai in the same way that CFUGs have been successful in the Middle Hills remains to be seen.

3.5 REDD+ BENEFIT DISTRIBUTION

An overall national plan for REDD+ benefit distribution has yet to be settled upon. Nepal's R-PP suggests that the varied forest types might necessitate a sub-national measurement and compensation scheme, but it notes that transaction costs might make such an approach unworkable (Nepal R-PP, 2010).

The NORAD pilots are being used as a test case for benefit distribution at the local level. Each pilot gathers numerous CFUG's within a watershed area into a REDD Network. The Networks will then receive REDD+ seed money, and eventually payments for the emissions avoided and or carbon sequestered within their watersheds. At that point though, benefits will not necessarily flow to individual CFUGs on the basis of how many emissions they actually avoided or sequestered. Rather, the Networks plan to use the following four criteria to distribute funds to their member CFUGs: 1) the amount of carbon sequestered within the CFUG 2) the poverty index within the CFUG 3) the extent of indigenous and socially marginalized (*Dalit*) groups present, and 4) the percentage of women-led households in the CFUG.[89]

The interviews conducted with the REDD Networks in Chitwan and Gorkha made it clear that the benefits to be distributed are not going to be direct financial payments. Rather, REDD+ revenues will go into funds that each CFUG already has established to pay for programs such as fuelwood alternatives, bio-gas and other livelihood programs. When Nepal enters a full implementation stage for REDD+, benefit distribution, at least within the CFUGs, will likely follow the distribution model being used in the pilots.

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85 Interview with Dr. Bhaskar Karky, Resource Economist at the International Centre for Integrated Mountain Development (ICIMOD) on April 29 2011, noting the strategy had not be adopted by the Ministry of Forestry, and Interview with REDD Cell on April 29 2011.

86 Interview with REDD Cell on April 29 2011.

87 Bhaskar Karky Interview.

88 *Id. See also,* Operational Guidelines for Forest Carbon Trust Fund (2011), available at http://communityredd.net/wp-content/uploads/2011/06/REDD-FCTF-Operational-Guidelines-English.pdf.

89 Bhaskar Karky Interview, See also Operational Guidelines for Forest Carbon Trust Fund (2011).

In Nepal's forest land situated outside of the CFUG structures, the issue of benefit distribution is substantially less clear. Such land includes the Government Managed Forests and the Leasehold Forests. Interviewees within the Ministry of Forest and Social Conservation frequently referenced the "collaborative forestry" model as a vehicle through which REDD+ could be implemented in non-CFUG forests, particularly in the Terai. As discussed above, under the CFM model the government is entitled to 75 percent of the proceeds of any forest products from CFM lands. No REDD+ pilots have yet been launched in CFM areas. Interviewees did not discuss any plans for benefit distribution within Government Managed Forests or Leasehold forests but given the apparent preference to try to upscale CFM, that modality will likely be utilized in Government Managed Forests.

3.6 ENTITLEMENT TO RECEIVE REDD+ BENEFITS UNDER NEPALESE LAW

Nepal has not adopted laws creating new "carbon rights" or explicitly outlining entitlements to receive benefits from emissions reduction or carbon sequestration efforts. Existing legislation governing land, forests, and mining all contain substantial areas of overlap that cast serious uncertainty over entitlements to REDD+ benefits. This section first discusses the conflicts between the various laws and then discusses entitlements within the CFUG and CFM structures.

3.6.1 OVERLAPPING LAW

Contradictory and overlapping legal provisions in Nepalese law pose significant problems for legal clarity, not just within the land and forestry sector. One interviewee said that with respect to the Local Self Government Act of 1999, there are 43 other Acts that need amendment in order to clarify areas of overlap.[90] Political will to deal with such legislative problems is currently lacking though, and will likely continue to be absent until Nepal's new constitution is finalized.[91] Having already missed several deadlines set forth in the interim Constitution, it is unclear when Nepal will have its new constitution.

One vehicle through which Nepal is prepared to pursue REDD+ is the CFUG structure. If the Forest Act, which governs the CFUG structure, is followed, then entitlements to REDD+ benefits seem relatively clear. However, inconsistent provisions in other laws raise the potential for contrary interpretations on entitlement. The two primary laws through which CFUG entitlements could be compromised are the Local Self Government Act of 1998 (LSGA), and the Nepal Mines Act of 1966.

The LSGA gives Village Development Committees (VDCs) the right to sell forest resources to generate income from within the VDC area (Acharya et al., 2009). VDCs cover the entire country as the next sub-unit under the District level. The LSGA specifies that forests and forest resources falling within the VDC area are the property of the VDC, but includes a provision that:

"Income May Be Generated Through Selling: The Village Development Committee may sell the following objects situated within its area:

> (a) Soil of governmental barren land;
>
> (b) Products of public ponds or gardens;
>
> (c) Assets of the Village Development Committee;
>
> (d) Among the forest products situated within the village development area, dried timber fire woods, branches, splints, twigs, roots etc.;

[90] Dil Raj Khanal Interview.
[91] Id.

(e) Straw, grass etc." (*Local Self Governance Act*, 1998, section 58).

The legal permission to sell forest products could quite plausibly be interpreted to include carbon offsets depending on how these lists are interpreted. Emissions reduction and carbon sequestration differs from other forest products in that it is not extractive in nature. For example, unlike the selling of firewood, the selling of carbon credits derived from a forest requires actually enhancing rather than extracting products from the forest. All the forest products listed as under VDC authority in the LSGA are extractive in nature, so it should follow that carbon credits do not fall naturally within that authority. Nonetheless, because neither list is exhaustive it may be that a VDC could successfully argue for inclusion of carbon credits within the bundle of forest products it is authorized to sell. That interpretation would clearly conflict with the forest use rights of the CFUGs. CFUGs will invariably be within VDC boundaries, so this overlap raises the potential for conflict over REDD+ funds between VDCs and CFUGs. Some of the interviewees expressed the sentiment that the VDC would actually be a better administrative unit for distributing REDD+ funds.[92] However, at this point they lack the capacity to function effectively, and political turmoil within Nepal has prevented elections to VDC positions for nearly 10 years.[93] If in the future the VDCs gain additional capacity to actually administer their land areas, under the LSGA, they could bring a strong legal argument that the VDC, not the CFUG is entitled to receive REDD+ benefits.

Similar overlap in law can be found with respect to mined products. According to The Forest Act of 1993, the Act gives ownership to CFUGs, while the LSGA 1998 gives ownership to the VDC and DDC [District Development Committee]" (Acharya et al., 2009). Neither the Forest Act nor the LSGA define mined products. The Mines and Minerals Act 2042 of 1985 defines minerals as "inorganic substance with a chemical compound of any definitive physical properties and elements, other than those of petroleum and gas, located on the surface or underground of the land" (Section 2[a]). Under the Act "all minerals lying or discovered on the surface or underground in any land belonging to an individual or the government within Nepal shall be the property of the Government of Nepal" (Section 3).

It is unclear whether carbon sequestration should fall within the definition of minerals in the Mines Act. The most straightforward and beneficial interpretation would be to recognize that although carbon itself is an element, the sequestration of carbon under REDD+ is taking place in organic substances, i.e., trees and other biomass. However, if sequestered carbon is interpreted to fall within the definition of minerals, then there is potential for the government to claim ownership of it and divert entitlement to REDD+ benefits away from other rights holders, such as CFUGs.

3.6.2 COMMUNITY FOREST USER GROUPS

Despite the potential for legal conflict over REDD+ benefits, the primary focus of Nepal's REDD+ efforts are the CFUGs. In the context of the CFUGs most interviewees seemed fairly confident that the communities themselves will be entitled to potential REDD+ benefits such as income from the sale of carbon credits. For example, K.C. Paudel, Joint Secretary of the Environment Division of the Ministry of Forestry and Soil Conservation asserted that "in community forest contexts the community owns the carbon; it's like a fruit on the tree."[94] This perspective does appear to flow naturally from the Forest Act of 1993 and the 1995 Forest Regulations (Acharya et al., 2009). Though the government maintains ownership over the land and also provides some restrictions as to what uses a CFUG is allowed to exercise over the forest, the Act does not appear to contemplate the reservation of any use rights or benefits from forest products to the government. The Act provides that:

92 Interview with Bibek Chapagain, director of Winrock International, and Nira Bhatta, Program Associate on May 5 2011.

93 *Id.*

94 Interview with Dr. K.C. Paudel, the Joint Secretary of the Environment Division of the Ministry of Forestry and Soil Conservation (REDD Cell member) on April 29 2011.

> "The District Forest Officer may hand over any part of a National Forest to a Users' Group in the form of a Community Forest as Prescribed entitling to develop, conserve, use and manage the Forest and sell and distribute the Forest Products independently by fixing their prices according to Work Plan. While so handing over a Community Forest, the District Forest Officer shall issue a certificate of alienation of the Community Forest" (Chapter 5, Section 25[1]).

The Forest Act also provides a definition of forest products:

> "Forest Products means the following products which are contained or found in or brought from forests:
>
> (1) Timber, firewood, charcoal, catechu, rosin, wood-oil, bark, lac, pipla, pipli (piper longum), or
>
> (2) Trees, leaves, fruits, flowers, mahwa (bassia longifolia), chiraito (swertia chiretta), Kutki (picorhiza Kurroa) and all kinds of wild herbs, vegetation and different parts or organs thereof, or
>
> (3) Boulders, soil, stones, pebbles, sand, or
>
> (4) Birds, wild lives and trophies thereof" (Chapter 5, Section 2[c] [1–4]).

This list would appear to be quite broad, potentially granting a great deal of extractive power to CFUGs. However, the Forest Regulation 2051 of 1995 places substantial limitations on CFUGs. The Regulations provide more detail on the structure of CFUG work plans and permitted activities within forests managed by CFUGs. The activities prohibited by the Regulations include:

> "(a) To destroy the Forest or mortgage or otherwise transfer the ownership of the land covered by the Community Forest; (b) To clear Forest areas for agricultural purposes; (c) To build huts and houses; (d) To take any action which may cause soil erosion; (e) To capture or kill wildlife in violation of prevailing laws; (f) To extract or transport rocks, soil, boulders, pebbles, sand etc." (Chapter 5, Section 31[a–f]).

Outside of these distinct prohibitions, the Regulations allow freedom for the user group to make use of forest products and to market excess products outside the user group, so long as those uses conform to the CFUG's operation plans. For example the regulations regarding maintenance of receipts and records clearly contemplate the ability of CFUGs to sell forest products outside the group (Chapter 4, Section 33[2]) and run an industry based off forest products (Chapter 4, Section 32[4]). Similarly, regulations regarding permits allow for the possibility to transport both timber and non-timber forest products for marketing outside the CFUG (Chapter 4, Section 35).

Nowhere in either the Forest Act or the Regulations is there any indication that the Government reserves for itself the right to benefits from forest products on CFUG forest land. Only land ownership is reserved for the Government, but all allowable benefits that can be derived from the forest are given over to the CFUGs.

Neither the Act nor the Regulations mentions carbon sequestration or payments. Neither is carbon mentioned as a forest product by the Forest Act. As discussed above, emissions reduction and carbon sequestration are forest enhancing, rather than extractive, so just as carbon credits do not fit neatly within the list of forest objects that a VDC could sell under the LSGA, they do not fit neatly within the list of forest products defined in the Forest Act. However, if all benefits from forest products flow to the CFUGs rather than the government, it seems logical that entitlement to REDD+ benefits and potentially future income from carbon credit sales that flow to Nepal as a result of emissions reduction and sequestration within CFUG forests legally should accrue to individual CFUGs. This issue however is a substantial area of risk within the current legal framework that should be clarified as part of Nepal's ongoing REDD+ strategy development.

If REDD+ and carbon credit money does indeed flow uncontested to CFUGs, then it should be used according to the rules governing CFUG funds. Chapter 9, Section 45 of the Forest Act provides that each CFUG shall maintain a fund of its own into which shall be deposited: "(b) The amount of grant, assistance or donation received from any person or organization, (c) The amount received from the sale and distribution of the Forest Product, (d) The amount collected through fine, (e) The amount received from any other sources" (Forest Act, 1993, Chapter 9, Section 45). This fund is then used to pay for any expenses incurred by the group for its activities under the operation plan. If there is money left in the fund "the Users' Group may spend for the activities of other public interest" (Forest Act, 1993, Chapter 9, Section 45[4]). Money flowing into the CFUG from REDD+ and carbon credit sales would need to be funneled into these funds, and there is no provision in the fund rules allowing money to be directly distributed back to individual community members or households. Rather, the money would need to be spent on activities of "public interest." As such, it would appear that the entity holding the entitlement to receive a REDD+ benefit would be the CFUG itself, not individual households.

This conclusion that individuals and households within CFUGs would not receive direct payments is consistent with information gathered from interviewees at the REDD+ pilot sites in Chitwan and Gorkha. The REDD Network in Chitwan communicated that funding that comes through from the REDD+ pilot would be used to pay for specific projects for the whole community, or for livelihood projects targeted at small communities within the network.[95] Similarly, the REDD Network in Gorkha intends to distribute money coming from the REDD+ pilot among the various CFUGs within the Network, and each CFUG would use the money according to the rules that it already had in place for their existing funds.[96] These funds supported livelihood and alternative income generation projects, and the Network asserted that REDD+ money would go to these projects within each CFUG, rather than to individuals or households.[97]

3.6.3 COLLABORATIVE FOREST MANAGEMENT

Collaborative Forest Management exists primarily as part of a forest policy promulgated by the MoFSC rather than a well-defined legal or regulatory entity governed by legislation, like the CFUGs (FSCC, 2003). Additionally, very few CFM areas currently exist. These two factors make it somewhat difficult to analyze rights to REDD+ benefits to the same extent as is possible under the CFUG model. The most relevant aspect of CFM to entitlements is the revenue sharing breakdown. As discussed earlier, the lion's share, 75 percent, of revenues generated on CFM forestland will go to the central government. It seems likely that if CFM is expanded to include REDD+ activities, this will mean the vast majority of revenues generated from REDD+ activities on CFM land will accrue to the central government. In the current setup the remaining 25 percent of revenues are to go to the local government, which would be the VDC, and to local communities that participate in the CFM. However the CFM policy does not specify how funds are to be shared among the local government and community. As such, entitlements to benefit from REDD+ under the CFM model 1) is not clearly spelled out, and 2) is a creature of forest policy rather than law. Both factors make these entitlements extremely unclear and potentially unenforceable by local communities.

3.6.4 A NEW CONSTITUTION

Nepal's current process of drafting a new constitution creates some additional legal uncertainty over entitlements. The current lines of federal and provincial/district divisions are unclear.

It seems likely that carbon related matters will be managed by the central government; however control over forests will likely be managed at the provincial level. Under such a division it is as yet unclear how community interests and forest carbon rights will be protected.

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95 Interview with members of REDD Network in Chitwan on May 1 2011.
96 Interview with members of REDD Network in Gorkha on May 2 2011.
97 Id.

3.7 SOCIAL AND ENVIRONMENTAL IMPACTS OF THE REDD+ SYSTEM ON FOREST-DEPENDENT COMMUNITIES

To some extent, it is too early to predict the social and environmental impacts of REDD+ on forest-dependent communities. There is the potential that the distribution of REDD+ benefits could create both conflict and benefits depending on the area of Nepal in question. For example, in the CFUGs situated in the middle hills and high hills, it is likely that REDD+ will have a small but beneficial impact both on the society and environment. REDD+ revenues seem likely to be used to finance development and livelihood programs. If these benefits are indeed distributed according to the four criteria discussed previously, then poorer communities, indigenous communities and women-headed households might encounter measurable benefits. It should be noted, however, that these benefits will not be delivered in the form of payments to individuals, but rather extra funding for other development and livelihood programs.

If the scale of REDD+ revenues becomes sufficient to attract attention from Village Development Committees or District Forest Officers then the somewhat tenuous legal position of CFUGs could lead to conflict over who is entitled to these revenues. In a worst case scenario, it could be possible for the Ministry of Forestry, through DFOs, to dissolve or control CFUGs in order to capture REDD+ revenues for the government rather than for the CFUGs.

Even within the CFUGs, the current system of using a trust fund to collect and distribute money from the sale of excess forest products could easily be subject to local elite capture. In theory each CFUG is supposed to use these funds for development, tree planting, and livelihood programs according to their own agreed-upon plan. However, in reality it is likely that a good portion of this revenue could be captured by local elites (Kanel and Kandel, 2004). Since payments from the REDD+ pilots are to flow into these same local trust funds, a similar risk will arise for REDD+ revenues. This situation could raise the potential for inter-community conflict, especially if community members are forced to make land use changes but then see no benefit come as a result of their efforts.

In current practice the participation of indigenous groups within CFUGs varies from community to community. Representatives from the Nepal Federation of Indigenous Nationalities (NEFIN) said that in most CFUGs indigenous people are not represented in CFUG decision making bodies, though in parts of Nepal where they have higher population concentrations they are better represented.[98] Additionally, even within the NORAD REDD pilots, indigenous peoples reportedly had not been well informed of their rights and responsibilities.[99]

Representation of women within CFUG decision making is also sub-optimal. The guidelines for community forestry state that women should comprise 50 percent of the CFUG committee. However, a 2005 study found that only about 25 percent of CFUG members were women, and that the "interests of women and other marginalized sectors, who earn their livelihood through common resources, are seldom addressed" (Acharya, 2005). The REDD Networks visited during the study reported that each CFUG had sent one male and one female representative to the Network. In the field visit meetings, however, men far outnumbered women, and the women rarely spoke up. There is room for improvement in ensuring full and meaningful participation of women within REDD+ projects in Nepal. If done well, this approach could serve as a mechanism for encouraging CFUGs to better integrate the concerns of female members into their decision making processes.

[98] Interview with Pasang Dolma Sherpa, National Coordinator at Nepal Federation of Indigenous Nationalities (NEFIN) on May 5 2011.
[99] Id.

3.8 WILL DISTRIBUTION OF REDD+ BENEFITS INCENTIVIZE THE DESIRED LAND USE BEHAVIOR?

It is unclear that REDD+ benefits will be sufficient to incentivize substantial changes in land use in Nepal. The CFUGs already have an established history of forest conservation and reforestation, so REDD+ revenues flowing to the CFUGs may simply be an added benefit for the work that CFUGs are already doing, rather than an incentive to change practices. Interviewees at the REDD Network in Chitwan were asked how the REDD+ pilot was changing their behavior and reported that not too much has changed other than efforts to reduce the use of fuel wood taken from community forests.[100] They did suggest that some of the indigenous communities within the pilot watershed were considering REDD+ as a reason to stop shifting agricultural practices. The Gorkha REDD Network expressed a similar sentiment that the REDD+ pilot was further encouraging what they were already doing. The pilot included education for communities on reducing the use of forests as fuel wood sources, but it did not appear evident that the community was engaging in significantly more tree conservation or planting as a result of the pilot.[101]

Outside of the CFUG structure REDD+ may not be sufficient to change land use behaviors. First, it is not yet clear how Nepal would successfully conduct REDD+ activities within protected areas, government managed forests and other community-based forest management systems (such as leasehold forests, religious forests, etc.). To do so the CFUG model or a successful collaborative forestry model would need to be significantly expanded. The capacity for expansion and political will to achieve this would be substantial. However, even if this up-scaling was achieved, the opportunity costs for avoiding deforestation may be too high. Outside current CFUGs, non-forestry land uses, which tend to involve resource exploitation rather than conservation, may simply be too lucrative for REDD+ to incentivize land use changes.

Land use within the Terai region also presents a particular challenge for REDD+. This lowland region of Nepal contains much of the country's most fertile land, and is also the site of significant political and ethnic conflict. Much of the conflict over land in the Terai is between groups that migrated from the low hills to the Terai and groups of traditional forest users who were already in the area.[102] In addition to land conflict, alternative land uses are lucrative in the Terai because of its proximity to Indian markets. The relatively small REDD+ payments that may come as a result of greater forest conservation in the Terai will likely be insufficient to incentivize any land use changes there. This situation may be especially true if the government applies the 75/25 benefit share used in the collaborative forestry pilot projects in that region.

3.9 SUGGESTED CHANGES IN LAW AND PRACTICE

The CFUG structure has been successful for forest promotion in Nepal, but some clarification of law will be needed to ensure CFUGs can also succeed in a REDD+ context. Individual CFUGs need to have a more solid legal foundation upon which to defend their entitlements. In order to provide sufficient legal clarity some amendments to existing law or the passage of a new carbon rights law will be needed. The risks posed by the inconsistent provisions of the Forest Act, the Local Self Governance Act and the Mines Act need to be dealt with in order to provide sufficient clarity over carbon rights. Additionally, the problem of CFUGs having no right to appeal adverse dissolution decisions to outside the Ministry of Forest and Soil Conservation must be addressed.

With respect to the Collaborative Forestry model, greater clarity of rights and responsibilities for stakeholders will be necessary. Currently, Collaborative Forestry is not well fleshed out in Nepal's forestry laws and regulations, and it is not widely implemented. If Nepal intends to rely on this model in the Terai rather than scaling up the CFUG system, then much greater legal clarity will be necessary to identify potential

[100] Interview with REDD Network in Chitwan on May 1 2011.
[101] Interview with REDD Network in Gorkha on May 2 2011.
[102] Interview with Dr. Naya Sharma Paudel of Forest Action on May 4.

entitlements to REDD+ benefits and to incentivize land use change. Local communities should also receive a higher percentage of REDD+ revenues than they do of forest product sales revenues.

Given that all of Nepal's current legislative and political efforts are focused on the drafting of a new Constitution, it seems unlikely that the needed legislation would be drafted or passed. Nonetheless, future REDD+ efforts may flounder without this clarity. Nepal might consider drafting new carbon rights legislation clearly indicating that it overrides contrary provisions in existing law. The preferred structure for such legislation would be to clearly enumerate the beneficiaries of REDD+ activities within each of Nepal's five forest modalities listed in the Forest Act. The legislation should also clarify whether carbon is to be considered as a product of mining, or a product of the forest, with the latter being preferred. If Nepal's developing REDD+ strategy after the NORAD pilots continues to be focused on CFUGs rather than VDCs, then it will also be essential to clarify that CFUGs rather than VDCs are entitled to REDD+ benefits.

A change in practice that could lead to greater forest preservation or enhancement and thus additional emissions reductions or sequestration would be to allow further growth of CFUGs. Many interviewees expressed the sentiment that the government was reluctant to expand the presence of CFUGs in forest land. This reluctance makes sense in that the MoFSC is losing control over land when it grants permission of a new CFUG. However with the clear track record of successful reforestation by CFUGs, if Nepal is serious about using REDD+ as a vehicle to generate additional carbon sequestration it ought to encourage rather than thwart CFUG formation. This approach could be especially relevant in the Terai region where it was reported that many groups are already operating as *de facto* CFUGs, but have not gained approval from the District Forest Officer yet.[103]

[103] Peter Branney and Ramu Subedi Interview.

NEPAL CASE STUDY ANNEX A: LIST OF INTERVIEWS

Type of Organization	Organization Name	Contacts Interviewed & Title
Government	Ministry of Forests and Soil Conservation	Keshav Prasad Khanal, REDD Forestry and Climate Cell: Under Secretary (Tech.)
	Federation of Community Forestry Users	Dr. Dil Raj Khanal, REDD+ Policy Facilitator.
	Ministry of Forests and Soil Conservation	Dr. K.C. Paudel, Joint Secretary (REDD Cell director)
	Department of National Parks and Wildlife Conservation	Krishna Prasad Acharya, Director General
	Ministry of Environment – Climate Change Management Division	Batu Krishna Uprety, Joint Secretary (Tech.) Chief.
	Department of Forests and Soil Conservation	Ram Nandan Sah, Undersecretary
Local/Regional Government	Chitwan	Jeeban Thakur, District Forest Officer
Local Civil Society	Federation of Community Forestry Users	Dr. Dil Raj Khanal, REDD+ Policy Facilitator
	REDD Network, Chitwan Pilot Project.	REDD Network coordinator, secretary of the CFUG, Network Facilitators, Assistant Forest Officer, approximately 12 other community members, including 4 women.
	REDD Network, Gorkha Pilot Project	In attendance: FECOFUN steering committee members, Chairman of the REDD Network, ANSAB technician, Assistant Forest Officer, approximately 15 other community members, including 3 women.
	Forest Action	Dr. Naya Sharma Paudel, Executive Coordinator, Environmental Governance Specialist
International Institutions	International Centre for Integrated Mountain Development (ICIMOD)	Bhaskar Singh Karky, Ph.D., Resource Economist Sustainable Livelihoods
	International Centre for Integrated Mountain Development (ICIMOD)	Laxman Joshi, Ph.D., Payments for Environmental Services Specialist
	International Centre for Integrated Mountain Development (ICIMOD)	Eak Rana, REDD project coordinator
	Nepal Federation of Indigenous Nationalities (NEFIN)	Passang Dolma Sherpa, National Coordinator
Bilateral Agencies	USAID – Nepal: AID – DPA	Netra Sharma Sapkota, Natural Resource Management and Global Climate Change
	USAID – Nepal	Dr. Bill Paterson, Director, General Development Office

	Livelihoods & Forestry Programme (A program of Department for International Development)	Peter Branny, Program Advisor
	Livelihoods & Forestry Programme	Ramu Subedi, Deputy Programme Manager
International NGOs	Winrock International	Bibek Chapagain, Director
	Winrock International: Program Associate	Nira Nhatta, Program Associate
	Asia Network for Sustainable Agriculture and Bioresources (ANSAB)	Bishma P. Subedi, Executive Director
	ASNAB	Other ANSAB members

4.0 TANZANIA

4.1 STUDY OVERVIEW

Field Visit: Darryl Vhugen of Landesa and Peter Veit of WRI visited Tanzania from 16-28 May 2011 to gather information for the case study. The team conducted interviews in Dar es Salaam, Zanzibar, Morogoro, Arusha, 3 villages in the Suledo Community Forest area and in a village in the Enduimet Wildlife Management Area in the general vicinity of Arusha.

4.2 BACKGROUND

Approximately 40 percent of Tanzania's land area, consisting of 33-35 million hectares, is classified as forestland. About 90 percent of the forestland is miombo woodland found primarily in the southeastern portion of the country. These woodlands contain as many as 300 different species of trees, many of which rise up to 65 feet in height over broadleaf shrubs and grasslands. Protected areas cover 39 percent of the country. Important eco-regions in Tanzania include the Eastern Arc Mountains and the central savanna bushland and thickets; savanna grasslands east along the Kenyan border and east of Mount Kilimanjaro in the north; large mangrove and coastal forests along the eastern coast; and one of the largest mangrove forests in the world located at the mouth of the Rufiji River in southeastern Tanzania.

FIGURE 4.1: MAP OF TANZANIA AND LOCATIONS VISITED FOR REDD+ INTERVIEWS

Alternative land uses such as agriculture, livestock-grazing, settlement, and industrial development have put Tanzania's forests under significant pressure of conversion. At least half of the forest loss is due to shifting cultivation. Charcoal production is also a significant cause of deforestation and degradation along with hunting, mining and road construction. The country's rate of deforestation has remained relatively steady in the past 20 years. Between 1990 and 2000, Tanzania lost an average of 412,300 hectares of forest per year, a

deforestation rate of just less than one percent between 1990 and 2000. This rate has increased slightly to 1.1 percent per year between 2000 and 2005 (Tanzania [Draft] National Strategy for Reduced Emissions, 2012).

Tanzania's forests are extremely important to a large percentage of the population. Fuelwood and charcoal are used by 90 percent of the population for heating and cooking. Trees in the forest are the source of 75 percent of construction materials. Forests also provide game meat, nuts, fruit, honey, beeswax, fodder, medicinal plants and other important products. As in other countries, Tanzania's forests also provide a variety of ecosystem services including watershed functions, biodiversity, eco-tourism and carbon sequestration.

4.3 THE LAW

4.3.1 LAND LAWS

In 1995 the Tanzanian government adopted a Land Policy that is the foundation for the Land Act and Village Land Act, each of which were enacted 4 years later.[104] The Policy and these Acts embody a number of important principles, including, among others: (1) recognition of existing rights to land and longstanding land use or occupation; (2) the equitable distribution of, and access to, land by all citizens; (3) encouraging productive and sustainable use of land; and (4) equal land rights for women (USAID, 2010a). Both Acts define "land" as including the soil, what is underground (excluding minerals and oil) and what naturally grows on the land.[105]

Under the Land Act, all land is controlled by the President who holds it as a trustee for the people. Land in Tanzania is divided into three categories: (1) Reserved Land, including national parks and wildlife reserves; (2) Village Land, including registered Village Land, land that has been demarcated and designated as Village Land by village councils and land that has been occupied and used by villages for more than 11 years under customary law; and (3) General Land, which is all land that is not Reserve or Village Land. Importantly, the Land Act provides that unoccupied or unused Village Land is considered to be General Land.

Under the Village Land Act, adopted in the same year as the Land Act, there are three categories of Village Land: (1) communal land (markets, grazing land, etc.); (2) occupied land, primarily land held by individuals or by groups for grazing; and (3) land that has been set aside for future use (Village Land Act, 1999, Articles 12 and 13). Most forests on village land should be on either communal land or land set aside for future use.

The Land and Village Land Acts are inconsistent in one very important respect. Under the Land Act, General Land includes unoccupied or unused Village Land. However, under the Village Land Act this unoccupied or unused land is classified as land set aside for future use, making it Village Land. By law, if unoccupied or unused Village Land is deemed to be General Land, it falls under the jurisdiction of the central government Land Commissioner. If it is Village Land, it is controlled by the village government. This inconsistency has not been clarified by any court cases, so it is not clear which act would prevail in the event of a dispute over whether a parcel of unoccupied or unused land within a village is Village or General Land.[106]

In addition to this legal inconsistency between laws, there are also threats to village land that come directly from the Land and Village Land Acts. Under the Land Act, the president has the power to transfer Reserve or General Land to Village Land if doing so serves the public interest. Similarly, the president may transfer Village Land to Reserve or General Land pursuant to the Village Land Act. In each case, those with rights of occupancy are supposed to receive compensation (Land Act, 1999, Article 7; Village Land Act, 1999, Part III, Section 8[a]). These powers have been used to convert Village Land to General Land to make it available to

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104 Zanzibar has different laws that are beyond the scope of this case study.

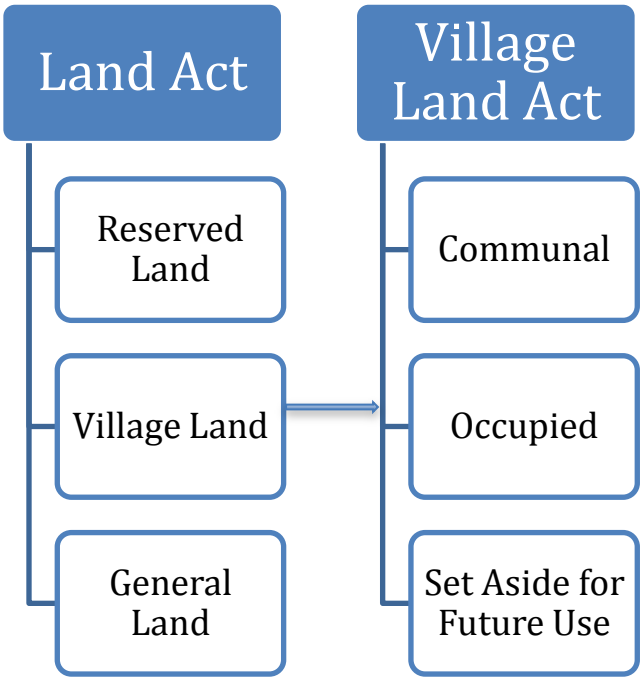
105 Land Act, Part I, Section 2, Interpretation. Village Land Act, Part I, Section 2, Definitions. (Both Acts state: "'land' includes the surface of the earth and the earth below the surface and all substances other than minerals and petroleum forming part of or below the surface, things naturally growing on the land, buildings and other structures permanently affixed to land.")

106 Interview with Dr. Zahabu, Forest and Beekeeping Division, May 16 2011; interview with Andrew Williams, May 22 2011.

investors, sometimes without adequate process or compensation. The Tanzania Investment Commission has established a land bank in order to make land available to investors.[107] REDD+ investors may be able to access land through the Land Bank. The Village Land Act does provide some scope for input from village councils on the transfer of Village Land.[108] Perversely, the Act provides greater protection for smaller transfers, allowing village councils to disapprove of a transfer under 250 hectares, but no such right for transfers of land areas over 250 hectares.

The Ministry of Lands and Human Settlement Development is responsible for administering and allocating General and Reserved Land. It acts on behalf of the President in his role as trustee of all land in Tanzania. It is led by a Commissioner of Lands (USAID, 2010a).

FIGURE 4.2: CATEGORIES OF LAND IN TANZANIA



4.3.2 FOREST LAWS

The Forest Act 2002, essentially governs the use and management of Tanzania's forests. There are four categories of forests in the Act: (1) national forest reserves; (2) local authority forest reserves; (3) village forests, which include village land forest reserves and community forests created out of village forests; and (4) forests which are not reserved which are on village land (Forest Act, 2002).

The percentage of Tanzania's forests found on General Lands is disputed. According to the draft National REDD+ strategy, about 17 million hectares of forests (about half of the total) are on General Land (Draft REDD+ Strategy 2010). This figure is consistent with figures provided by the Forest and Beekeeping Division (FBD) of Tanzania's Ministry of Natural Resources and Tourism. According to FBD, about 54 percent of Tanzania's forests are on General Land, 37 percent are government reserved forests and only 9 percent are private and village forests.

[107] Interview of George Jambiya, May 16 2011; Country Profile at 13.
[108] See the Village Land Act at Part III, Section 6(a)-(b).

However, according to the Ministry of Lands, 70 percent of the country's land area is Village Land, 28 percent is Reserve Land, and only 2 percent is General Land.[109] While conducting a national forest inventory, one surveyor found that there is virtually no General Land in Tanzania.[110] If 2 percent or less of Tanzania's land area is General Land, it is impossible for there to be 17 million hectares of forests on General Land. Based on the definition of Village Land in the Village Land Act and existing maps maintained by the Ministry of Lands and local communities, it appears that the vast majority of forests in Tanzania are on Village Land, whether or not formally declared to be Village Land Forest Reserves (Tanzania Forestry Working Group, 2009).

While the amount of forests on General Land is subject to dispute, forests on General Land are the most vulnerable to deforestation and degradation. Control over forest resources, and therefore responsibility for managing such forests, including issuing concessions, is vested in the central and district governments. Government management is often weak and General Land forests are often treated as an open-access resource subject to minimal sustainable forest management (USAID, 2010a).

Participatory Forest Management (PFM) has been a key part of Tanzania's National Forestry Policy for more than 15 years. According to the Tanzania Forestry Working Group (2009), "the premise of PFM is that by clarifying village rights to forest and forest benefits, including the right to capture economic benefits from forests in the future in a secure and legal manner, local communities will invest in conserving forests out of their own interest". There are now hundreds of PFM projects throughout Tanzania, although the exact number and amount of land covered is subject to considerable dispute and few projects are fully registered and operational due to capacity constraints.

Two types of PFM projects are in place in Tanzania: (1) joint forest management (JFM) in which a community manages a local or central government forest reserve pursuant to an agreement with the government; and (2) community-based forest management (CBFM) where a local community or communities manage forests on Village Land that the local community declares to be Village Land Forest Reserve (VLFR). PFM has had a positive effect on the forests in environmental terms, and has provided more secure rights and access to forests for communities. With respect to financial gain, communities have had difficulties with securing and enforcing their rights to the forest resources and with inadequate benefit-sharing mechanisms, especially with JFM. PFM, therefore, has provided minimal financial gains to the local community (Tanzania Forestry Working Group, 2009; REDD-NET, 2009).

Under a CBFM arrangement, local communities may establish a VLFR by establishing a Village Natural Resource Committee, demarcating the boundaries of the VLFR, conducting a forest inventory, preparing a forest management plan and declaring the VLFR by having it recorded by the district government. Once these steps are completed, the VLFR is a legal entity. The VLFR may be, but need not be, officially gazetted at the ministerial level (Wildlife Conservation Society of Tanzania, 2010).

While the central government owns all biological resources of the Forest, the Village Council or committee representing multiple villages assumes legal control over the use of all forest resources upon declaration of a VLFR (Forest Act, 2002; Wildlife Conservation Society of Tanzania, 2010). Thus, "by establishing VLFRs, communities obtain full legal rights to manage and benefit from their forests" (Wildlife Conservation Society of Tanzania, 2010).

4.3.3 WILDLIFE MANAGEMENT AREAS

Wildlife Management Areas (WMAs) are formed to promote community-based wildlife management outside of national parks and other protected areas. WMAs are formed on Village Lands in which local communities

[109] Tanzania Ministry of Lands and Human Settlement Development 2011. Available online. URL: http://www.ardhi.go.tz/land-delivery-services.html (accessed June 13 2011).

[110] Interview with Prof. Rogers Malimbwi, Forestry and Beekeeping Division, May 16 2011.

receive limited user rights to wildlife and other natural resources pursuant to a management plan approved by the government. Government regulations set forth rules for benefit-sharing by which communities share with the government revenues derived from permitted hunting, ecotourism and other activities within the WMA. Generally speaking, communities are supposed to receive a 65 percent share although there is some question as to whether this occurs in all cases[111] (Wildlife Conservation Act, 2009, Articles 31–37; Wildlife Conservation Society of Tanzania, 2010).

Land placed in a WMA remains Village Land and allows for agriculture, grazing and settlement within the bounds of the WMA management plan. However, most WMAs are comprised of several villages, and the representatives of these villages appoint a management authority, known as the "Authorized Association." The Authorized Association is an NGO that oversees the WMA and manage revenues derived from WMA activities. Thus, the individual villages lose a substantial measure of control over their land because much of their authority is transferred to the Authorized Association.[112]

Importantly, forming a WMA does not provide villages (through the Authorized Association) with any additional rights over forest resources on village land. The Forest Act governs forest resource use and management (Wildlife Conservation Society of Tanzania, 2010). In addition, neither the Forest Act nor the Village Land Act specifically mentions WMAs. Under the Village Land Act, "Village Councils are empowered to use village land use plans as tools to implement policies for better land use and management including wildlife conservation" and potentially the creation and leasing of game farm areas (Lungren et al., 2000, p.94). In practice this statement appears to include the power to form and participate in the WMA structure; however a legislative amendment making this power explicit would be beneficial.

4.3.4 LAND AND FOREST INSTITUTIONS AND GOVERNANCE

Tanzania's rural areas are the home of more than 10,000 legally constituted villages. The local managing body is the 25-member Village Council headed by a Village Chairman. Members of the Village Councils are elected by Village Assemblies, which consist of all village residents over the age of 18. One quarter of the members of the council must be women (Wildlife Conservation Society of Tanzania, 2010). Under the Village Land and Land Acts the Village Council is responsible for managing village lands. Land allocation, zoning and boundary decisions are subject to the approval of the Village Assembly. As indicated above, the stipulations for CBFM require that a Village Natural Resource Committee is appointed to oversee a village's VLFR(s). WMAs are managed by the Authorized Authority.

4.4 TANZANIA'S EMERGING REDD+ STRATEGY

Tanzania participates in the UN-REDD program and the World Bank's Forest Carbon Partnership Facility. It is also a beneficiary of Norway's International Climate and Forest Initiative.

The designated authority for all climate change issues and UNFCCC processes is the Division of Environment (DoE) in the Vice President's office. The FBD of the Ministry of Natural Resources and Tourism is playing a key role in the development of Tanzania's REDD+ strategy.

A REDD+ Task Force was established in 2009. It consists of eight members from DoE and FBD. The Task Force is supported by five technical working groups staffed by representatives of government, civil society and the private sector. One of the working groups focuses on legal and governance issues, including issues of

[111] Interview with members of the Enduimet WMA Authorizing Authority, May 26 2011.

[112] Interview with Carol Sorenson, Coordinator, Tanzania Natural Resource Forum, May 25 2011.

land tenure, carbon rights and gender. The others will work on monitoring and verification, financial mechanisms, agriculture and energy policy.[113]

In December 2010, Tanzania issued its Draft National REDD+ Strategy. While the strategy is still under discussion, it seems likely that its Vision will remain largely unchanged:

> "Tanzania implements a National REDD+ Strategy that ensures conservation and/or enhancements of its unique biodiversity values and forest ecosystems and the corresponding benefits, goods and services are equitably shared by all stakeholders for adaptation, mitigation and adoption of a low carbon development pathway under all processes as required by the UNFCCC" (Tanzania [Draft] National REDD Strategy, 2010).

A key objective of the Strategy is to provide "guidelines on how to effectively engage all relevant stakeholders and establish a fair and transparent benefit sharing mechanism that will enable appropriate incentives to be paid to deserving stakeholders within the country" (Tanzania [Draft] National REDD Strategy, 2010).

Tanzania completed phase 1 of development of its strategy, which also included submission of its R-PP in October 2010. Phase 2, including completion of the strategy is expected to last until mid-2012.[114]

Norway is funding nine pilot carbon projects that are expected to be developed over the next 3-5 years. Six of the nine will be designed in order to try to access the voluntary carbon market. To the extent that they are able to do so, all funds will flow directly to the projects rather than through the government. None of the projects have begun yet.

At this point, it appears that the government intends to establish the following two national level REDD+ institutions: (1) a National REDD Trust Fund that will receive all REDD+ funds, both from donors and the market; and (2) a National Carbon Monitoring Center responsible for monitoring, verification and reporting.[115] The draft strategy states that the National REDD Trust Fund will purchase all emissions reductions and removals and sell them internationally (Tanzania [Draft] National REDD+ Strategy, 2010). Apparently, this arrangement is due at least in part to the government's desire to minimize transaction costs associated with multiple points of sale and related marketing costs.[116]

4.5 REDD+ BENEFIT DISTRIBUTION

Tanzania recognizes the importance of adopting a REDD+ benefit-sharing mechanism and formula that provides sufficient financial incentives to incentivize those who use and control the forests to modify their behavior in ways that protect the forest (Tanzania Forestry Working Group, 2011). If, indeed, the government decides to direct all REDD+ benefits through a single national level institution, it will need to use existing benefit-sharing mechanisms or create a new one.

In general, the government appears to be contemplating passing a portion of REDD+ revenues to village governments which would then determine how to spend the funds. No decision has been made on whether or not to administer the funds through district governments or to send them directly to the Village Councils.[117] If the district government is utilized to direct funds, there will be substantial risks that corruption; as well as a lack of capacity and inefficiency at the district level will prevent benefits from actually flowing to the villages.

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113 Interview with Simon Milledge, Consultant on Environment and Climate Change, Norwegian Embassy, Dar es Salaam, May 20 2011; Draft REDD+ Strategy at 50.
114 Interview with Fred Manyika, Department of Environment, Vice President's Office, May 18 2011.
115 Id.; Milledge interview; Manyika interview.
116 Zahabu interview.
117 Zahabu interview.

With respect to existing benefit-sharing mechanisms, most attention is focused on the two PFM alternatives (JFM and CBFM) and WMAs. Under CBFM, the payments for permits for forest use are collected directly by the village. In WMAs the wildlife use fees are collected directly by the central government, which then returns a portion of the fees to the WMA. In both cases the Village Councils or Authorized Association, in the case of WMAs, decides how to spend the funds. Funds are not paid directly to individual households.[118]

WMAs have provided at least some benefits to communities. However, the funds generated so far in WMAs have been primarily wildlife-use fees, which are paid first to the government that, in turn, pays some of the money to the Authorized Association on behalf of the communities. This arrangement presents two risks: (1) the government may capture the majority of the revenues; and (2) there may be conflict between the Authorized Association and individual villages over the management and expenditure of WMA revenues. Under the WMA system there is potential for the Authorized Association to directly collect some fees, such as hotel concessions, however approval for these concessions have been slow, and this fee sharing process is not highly developed.

A third potential approach to benefit sharing would follow the approach used by the Carbon Tanzania pilot project operating in Mbulu District of northern Tanzania. The area is inhabited by the Hadzabe tribe, on land that is set aside and protected for an indigenous community under the Village Land Act. This project, operated by a company called Ecological Initiatives, is selling carbon credits on the voluntary market under the Plan Vivo standard for designing and certifying programs where communities are engaged in payment for environmental service (PES) schemes.[119] Ultimately, they will create a larger VLFR under the Forest Act. Revenue from the sale of carbon credits is divided between administrative costs, payments to experts for measuring carbon and $300 per month to the community. These payments are in addition to the tourism revenue that the company receives under a separate arrangement. Thus far, the community is using the funds to pay community members who are patrolling the forests.

4.6 ENTITLEMENT TO RECEIVE REDD+ BENEFITS UNDER TANZANIAN LAW

Tanzania has not adopted carbon rights legislation or other laws explicitly granting communities an entitlement to REDD+ benefits. It is widely recognized, including in the draft REDD+ strategy itself, that there is uncertainty concerning who has rights to receive benefits associated with reducing or removing emissions in some forest settings.[120] This issue has been discussed as part of developing the strategy and will be the subject of a new analysis that an NGO called Lawyer's Environmental Action Team (LEAT) will conduct as a part of Phase 2 of the REDD+ strategy development.[121] The greatest and most important area of uncertainty involves determining whether non-VLFR forests are on Village or General Land as such areas could involve millions of hectares of forestland.

As explained in some detail above, it appears reasonably certain that local communities hold the right to use forest resources, including non-timber forest products and the carbon sequestered in trees growing on VLFR land.[122] It seems to be equally clear that the government holds the carbon rights in forests on General Land or Reserve Land (other than VLFRs).

What is much less clear, however, both in law and practice, is what rights local communities have over forest resources found on Village Land that has not yet been declared to be a VLFR. The Village Land Act recognizes several categories of land use, including: (1) individual use and settlement, such as for agriculture

118 Interview of Peter Sumbi and Adam Kiduzi, WWF, May 17 2011; draft REDD+ Strategy at 37; TFWG at 9-10.
119 See http://www.planvivo.org/.
120 See, e.g., draft REDD+ Strategy at 19; Milledge interview.
121 Milledge interview.
122 Villages would still need harvesting licenses under the Forest Act.

and housing; (2) communal use, including land use for grazing and harvesting forest products; and (3) land set aside for future use (Village Land Act, 1999, Articles 12 and 13). Most forests on village land should fall under one of the latter two categories. Thus, these forests should be deemed to be Village Land, whether or not they have been declared to be under a VLFR.

Given this context, it is clear why the inconsistency between the Village Land Act and the Land Act, explained previously, becomes important. If non-VLFR forests on Village Land are considered to be "unoccupied or unused" under the Land Act, then may be deemed to be on General Land. If so, the right to manage and use the land and forest resources will be held by the government, not the local communities. If non-VLFR forests on Village Land remain Village Land as per the Village Land Act, then the right to manage and use land and forest resources, including carbon, should be held by the village.

Land does not have to be formally surveyed or registered to be considered Village Land under the Village Land Act and Land Act as the laws recognize customary rights of occupancy without such formalities. As a practical matter, however, it appears that government officials do not recognize as Village Land, land that has not been demarcated or for which there is no land use plan, including forested areas. As much Village Land has not been surveyed and/or is not covered by a land use plan, largely due to the cost and lack of capacity, local community control over the use of such land is very insecure.[123]

TABLE 4.1: LAND USE RIGHTS AND CARBON RIGHTS

Type of Land	Who Holds the Carbon Right
General Land	Government
Reserve Land (other than VLFRs)	Government
Village Land Forest Reserve	Village
Forests on non-VLFR Village Land	Unclear-village or government

Communities that form CBFM institutions and declared VLFRs would appear to have relatively secure carbon rights under existing law. Because carbon is not removed or extracted from the forest, such communities would not need a harvesting license under the Forest Act to sell carbon credits or to receive payments for emissions reductions or removals. Local communities that have not formed VLFRs may be hard-pressed to successfully assert their rights to carbon stored in trees on village land.

In sum, under existing law, whether non-VLFR forestland in a village is considered to be Village Land or General Land is crucially important. "Land" is defined in the law to include what naturally grows on the land. For the most part, natural resources (other than minerals and oil and gas), including forest resources found on Village Land are owned by the Village. Such resources on General Land are owned by the Central Government. If village forestland that has not been declared a VLFR is deemed to be General Land by the central government, the villages will not have a right to receive benefits from the sale of carbon credits or other carbon-related payments.

4.7. SOCIAL AND ENVIRONMENTAL IMPACTS OF A REDD+ SYSTEM ON FOREST-DEPENDENT COMMUNITIES

For the most part it is too early to try to predict the social and environmental impacts of REDD+ on forest-dependent communities as the REDD+ strategy and mechanism is not well-formed. To the extent that JFM and/or WMA mechanisms are used for benefit-sharing there are risks of corruption and elite capture of benefits, as these are existing problems with some of the institutions.[124]

[123] Zahabu interview; Malimbwi interview.
[124] Jambiya interview; Zahabu interview; REDD-net Bulletin.

Even more worrisome are the implications for forest-dependent communities if the non-VLFR forestland is legally deemed to be General Land. This situation will make such land easily available to investors and elites who wish to acquire forestland that they believe will generate significant income from REDD+ activities, with little or no compensation to the villages. Tanzania's experience with biofuel investments–where some communities lost their land when Village Land was converted to General Land and given to biofuels investors, is a cautionary tale (REDD-NET, 2009).

The potential impact of REDD+ on women is also somewhat uncertain. By law, Tanzanian women have equal rights to land. Discrimination on the basis of sex is prohibited. Women are legally entitled to significant representation on Village Councils. In practice, however, women hold rights to only an estimated 20 percent of all land registered in Tanzania. Few women, especially in rural areas, are aware of their rights. When they know their rights, they often lack the resources to enforce them (USAID, 2010a). The draft REDD+ Strategy acknowledges the potential harm to gender relations but the team did not find any significant support for addressing women's land rights issues as part of a REDD+ program.

Pastoral communities in Tanzania already face significant challenges and REDD+ might further marginalize this group. The National Land Policy of 1995 has officially discouraged what it called "nomadism" (Laltaika, 2009). Pastoral communities frequently fall outside the Village Land Act since their land use patterns may not be stable, and their land has not been declared Village Land. This situation puts the land upon which they rely for livelihoods potentially into the category of unoccupied or unused land and/or general land. Thus their land could easily become available to investors and elites who wish to acquire forestland to generate REDD+ benefits, leaving pastoralists without access to their traditional grazing land and without compensation for their loss and with potentially negative effects on food security.

4.8 WILL DISTRIBUTION OF REDD+ BENEFITS INCENTIVIZE THE DESIRED LAND USE BEHAVIOR?

Tanzania's nascent REDD+ scheme does not include much detail about incentivizing environmentally sound behavior in and around the country's forests. Deforestation is a big problem in Tanzania. Generally speaking, where PFM has been developed, forests are more sustainably managed compared to other forest areas (USAID, 2010). Given this context, efforts to expand and improve PFM should continue.

In areas where forest tenure is reasonably secure, such as in VLFRs, forest-friendly land use may result from the receipt of REDD+ revenues by villages that can be used for building schools or clinics if the income is high enough and the individuals whose behavior must change understand that the schools or clinics are a direct result of their efforts. However, if all REDD+ revenues flow first through the central government, will enough find its way to the local level? It is also not clear if local institutions will be sufficiently inclusive in order to ensure land or forest resource rights holders see that they and their community have benefited from their individual changes in land use behavior?

The bigger risk arises from the dispute over how to determine the amount of forestland on General Land versus on Village Land. The only way to motivate local communities to protect the forests is to ensure that REDD+ revenues for reduced rates of deforestation flow to community members. Recognizing that the non-VLFR forests are on Village Land and not General Land is crucial so that local community members will be rewarded for protecting the forest (Tanzania Forest Conservation Group et al., 2011).

4.9 SUGGESTED CHANGES IN LAW AND PRACTICE

There are a number of changes in law and practice that Tanzania could consider in connection with its emerging REDD+ program. First, the inconsistencies between the Village Land Act and the Land Act must be resolved. Addressing these inconsistencies can be done in a variety of ways. Perhaps the simplest way is to amend the Land Act in order to remove the provision stating that unoccupied or unused Village Land is

deemed to be General Land. This action would make clear that all land within the boundaries of a village (whether or not formally demarcated) is Village Land, whether or not such land is "unoccupied or unused" or not.

Second, Tanzania should consider amending existing laws in order to clarify that the definition of "land" in the Village Land Act and Land Act applies when determining the scope of the holder's rights to use forest resources found on that land under the Forest Act. As that definition of "land" includes what naturally grows on the land, the right to use that land would logically include the use of sequestered carbon. The right would be subject only to reasonable existing resource extraction limitations and licensing.

Third, the Ministry of Lands and the FBD should harmonize their maps and land definitions to align with the records of the Ministry of Lands. This step would clear up much of the confusion over the status of non-VLFR forestland on Village Land. While villages should be encouraged to, and assisted with, establishing CBFM institutions and declaring VLFRs, villages that do not wish to extract resources from the forests should nevertheless be able to receive benefits for emissions avoided on the forestland that they protect.

Fourth, the government should consider simplifying VLFR requirements for communities that do not wish to harvest timber. As VLFR requires demarcation, communities will be better able to access the carbon market if they can clearly show the boundaries of their forest so that accurate carbon calculations can be made. The government could require only a minimal forest management plan from communities that do not intend to extract timber resources.

Fifth, Tanzania should seek opportunities to empower women, pastoralists and other vulnerable groups in forest communities as part of its REDD+ capacity building and implementation efforts. Because REDD+ projects will likely provide benefits to communities and not individual households, the key to improving the status of women in the project areas is to find ways for women to participate more meaningfully in community decision-making. Strategies could include prioritizing the placement of REDD+ projects in communities that include women in Village Councils or other relevant institutional management bodies. Those providing REDD+ technical assistance to communities can and should be trained to work with communities to increase the involvement of women. Finally, the REDD Task Force should seek to ensure that organizations representing women have greater participation in phase 2 of the development of the REDD+ strategy.

Sixth, Tanzania should base its REDD+ system on its existing PFM program rather than on expanding protected areas that have the potential to displace forest dwellers and undermine livelihoods. While PFM in Tanzania certainly requires substantial improvement, sustainably managed forests have the potential to sequester more carbon than protected forests where trees cannot be harvested and can also be more effective in expanding forest cover. Active management of forests can actually create forest cover capable of sequestering more carbon than unmanaged or natural forests (Barry et al., 2010). Additionally, given the reality of weak governance and protection for protected areas in Tanzania, PFM schemes offer a better hope of actually obtaining increased forest growth and carbon sequestration. Most importantly, community forestry is also more consistent with protecting existing community rights to forest lands and community decision-making (Barry et al., 2010).

Finally, local communities need to become far more aware of the potential for REDD+ and what it could mean in terms of responsibilities and benefits. Few people participate in village government and decision-making is often lacking in transparency and accountability.[125] If REDD+ is going to benefit both forests and people, the people need to understand it and be more involved in deciding whether and how to participate and how to invest any income that results. A significant educational and capacity building campaign should be initiated.

[125] Zahabu interview.

TANZANIA CASE STUDY ANNEX A: LIST OF INTERVIEWS

Type of Organization	Organization Name	Contacts Interviewed & Title
Government	Vice-President Office (VPO)	- Kanizio F. and Fred K. Manyika, Senior Environmental Officer and Chair of REDD Task Force
	Forestry and Beekeeping Division	- Dr. Zahabu, FBD
Local Government	Jozani National Park, Zanzibar	- Salim Ali Khamis, Park Warden
	Kiteto District	- Jane Mutagurwa, District Executive Director - Fabian N. Nshuima, District Land, Natural Resources and Environmental Officer - Mr. Muhimili, District Forest Officer
	Zonal Environmental Committee (ZEC) and Sunya Village (part of SULEDO)	- ZEC Chairman - ZEC Secretary - 12 ZEC members
	Enduimet WMA	- 11 members of the AA including the Secretary, Treasurer, Administrator, Guard
Village Government	Lengatei Village (part of SULEDO)	- 14 members of the Natural Resource Committee, including the Chairman and Secretary as well as the Acting Village Executive Officer
	Lesoti Village (part of SULEDO)	- 10 members Also present in the meeting in Lesoti Village - Dr. Kelly Askew, University of Michigan - 2-man film crew - Prof. Maganga, Institute of Resource Assessment (IRA), University of Dar es Salaam - Lydia Nyeme, PhD student of Prof Maganga
Universities and Research Institutions	University of Dar es Salaam	- Dr. George Jambiya - Zabron Kengera, PhD Student
	Sokoine University of Agriculture, Morogoro	- Prof. George Kajembe - Prof. Salem Moyondo - Kikuwanza - Usamba Sal
	University of Maryland	- Emmanuel Sulle
	Round Table Africa	- Laura Tarimo, WMA researcher
	Conservation Resource Center	- Representative
Local Civil Society / Coalition of NGOs	MJUMITA (Tanzanian Community Forest Conservation Network)	- Theron M. Brown, Technical Advisor
	Tanzania Forest Conservation Group (TFCG)	- Nike Doggart, Senior Technical Advisor
	Lawyers' Environmental Action Team (LEAT)	- Prof. Hamudi Majamba, Faculty of Law, University of Dar es Salaam - Rugemeleza Nshala - Lutema
	Hakiardhi	- Cathbert Tomitho, Programme Officer
	Tanzania Natural Resource Forum (TNRF)	- Elias, Chairman - Carol Sorenson, Director - Representative
International Institutions	Food and Agricultural Organization (FAO)	- Prof. Rogers E. Malimbwi, Forest Inventory with FBD
	IUCN-East Africa	- Andrew Williams
Bilateral Agencies/Embassies	Norwegian Embassy	- Simon Milledge, Consultant, Environment/Climate Change

	USAID	- Mikala Lauridsen, Senior Technical Advisor, Consultant - Gabriel Batulaine, Senior Environmental Management Specialist
International NGOs	CARE/Tanzania	- Paul Baker, Director, CARE, 16 May, Monday - George Mkoma, CARE, micro-finance coordinator
	CARE/Zanzibar	- Raja Jarrah, CARE Climate Change Advisor and REDD point person - Amour B. Omar, Program Coordinator/Team leader-Zanzibar - Soud Mohammed Jumah, Monitoring and Evaluation and Learning Officer, HIMA - Fatima Ali Khamis, Community Forests and Institutional Strengthening Officer, HIMA - Ali M. Hilal, Leakage Control and Enterprises Development Officer, HIMA
	WWF	- Dr. Mwakalila, REDD - Peter Sumbi, Forest Programme Officer - Adam Kiduzi. Forest Programme Officer - Dr. H. Sosovele, CBNRM Policy Program Coordinator
	African Wildlife Foundation (AWF)	- Andrea Athanas, Senior Program Design Officer - Thadeus Binamungu, Senior Program Officer
	Honeyguide Foundation	- Damian Bell
Experts	Independent Consultant	- Prof. Adolfo Mascarenhas
Private firms	Manyara Ranch	- Clive Jones, former manager
	Ecological Initiatives (Carbon Tanzania)	- Mark Baker

5.0 MOZAMBIQUE

5.1 STUDY OVERVIEW

Field visit: Darryl Vhugen of Landesa visited Mozambique from 28 May to 7 June 2011 to gather information for the case study. He conducted interviews with government officials, project developers, project participants, representatives of NGOs and donors and others in Maputo, Chimoio, Nhambita and Gorongosa National Park. A list of interviews is attached as Annex A.

5.2 BACKGROUND

Mozambique contains approximately 40 million hectares of forest, which cover approximately 50 percent of the country's total land area. About two-thirds of the forestland is miombo woodland, which is found primarily in the central and northern parts of the country. These woodlands contain as many as 300 different species of trees, many of which rise up to 65 feet in height over broadleaf shrubs and grasslands. There are also significant mopane woodlands, featuring single-stem mopane shrubs and trees ranging up to 15 meters in height, as well as large mangrove forests located along the coast (Wertz-Kanounnikoff et al., 2011; Nhantumbo & Izidine, 2009).

FIGURE 5.1: MAP OF MOZAMBIQUE AND LOCATIONS VISITED FOR REDD+ INTERVIEWS

Between 1990 and 2005 Mozambique had an annual deforestation rate of 0.58 percent. The major drivers of deforestation are shifting agriculture, fuelwood consumption, permanent agriculture and clearing for mining activities. The miombo woodlands suffer the highest rate of deforestation, especially in areas close to towns or roads. Forest degradation is caused mostly by illegal logging and fire. While fire plays an important role in forest regeneration, frequent and intensive human-caused fire, mostly to clear land for agricultural production, is a major problem in Mozambique. Such fires in the country's miombo woodlands are the largest contributor to Mozambique's annual greenhouse gas emissions (Wertz-Kanounnikoff et al., 2011; Nhancale

et al., 2009; interview of Taquidir). One observer estimated that 70 percent of Mozambique's surface area burns every year,[126] although another estimate puts the figure at 40% nationwide (USAID, 2010b).

Protected areas cover 16 percent of the country. These areas include national parks, reserves and hunting areas (Nhancale et al., 2009). Prominent protected areas include the Niassa Reserve in northern Mozambique along the Tanzania border and the Gorongosa National Park in central Mozambique. Most protected areas include human settlements. Some of these communities are participating in co-management arrangements with NGOs or private developers, mostly in connection with attracting visitors wishing to view or hunt animals (De Wit & Norfolk, 2010).

Most Mozambicans live in rural areas where they depend largely upon forest resources for their livelihoods. Mozambique's forest sector is comprised of both formal forest enterprises and informal or subsistence users. Forest uses in both sectors include the production of timber products, and non-timber forest products (NTFPs) and the provision of forest services such as eco-tourism, biodiversity conservation and carbon sequestration. Enterprises in the formal forest sector are primarily engaged in timber production although there are some producing NTFPs and others focused on ecotourism and carbon sequestration operations. Informal enterprises are involved primarily in small-scale timber and NTFP operations (Nhancale et al., 2009).

5.3 THE LAW

5.3.1 LAND LAWS

Under Mozambique's 2004 Constitution the state owns all land. All Mozambicans are entitled to use and enjoy the land although they may not sell or mortgage the land they use. In the context of state ownership, the 1997 Land Law permits individuals, communities and entities to obtain long-term or perpetual land use rights known as a DUAT *(direito de uso e aproveitamento dos terras)*. DUATs can be obtained through (a) traditional and good faith land occupancy; (b) proof of occupancy for 10 years; and (c) a renewable, 50-year grant from the state. The first two categories of DUAT, available to individuals or communities, provide perpetual use rights and do not require delimitation or registration. DUATs are issued by the National Directorate of Land and Forests (DNTF) of the Ministry of Agriculture, the agency responsible for land administration in Mozambique.

FIGURE 5.2: TYPES OF DUATS

An important objective of the Land Law is to support and protect the land rights of communities, women and smallholder farmers while also encouraging investment. By affording perpetual use rights based on

[126] Interview with Mikael Rein, Community Based Natural Resource Management Expert for Mozambique, Mozambique Ministry of Agriculture, National Directorate of Lands and Forests, May 30 2011.

traditional occupancy, it explicitly recognizes the customary rights of communities to their traditional territories.

Community DUATs give communal use rights to land that is traditionally occupied by the community. Individual members of the community can obtain individual DUATs for community land if agreed upon by the community. Women and men have equal rights to hold land.

An investor must prepare a state-approved land exploitation plan in order to obtain a state-issued DUAT. The application process includes mandatory consultation with the community if the desired land is community-held. In theory, the community has the right to veto the proposed development and thus prevent issuance of the DUAT. In reality, however, the consultation requirement has often not been enforced and communities appear not to have meaningful recourse in those circumstances. When consultations have taken place they have tended to be rather cursory and hampered by community lack of knowledge and negotiating savvy and minimal participation by women and marginalized members of the community (USAID, 2010b).

The law does not require delimitation and registration of land rights obtained by occupancy. Only a relatively small number of communities, probably less than 10 percent, have undertaken the rather complex and expensive delimitation and registration process, despite the fact that it would strengthen their ability to prevent their land from being allocated to third parties. The size of the land areas that have been registered ranges from less than 10 hectares to as much as 500,000 hectares, but overall covers less than 10 percent of the national territory. The larger parcels tend to be in forested areas (De Wit & Norfolk, 2010). Documenting their rights in this manner makes it more likely that the land will be recognized as occupied, thus invoking the requirements of mandatory consultation by proposed investors (USAID, 2011b).

Efforts to increase community land delimitation and registration have been met with mixed success. It has never been a high priority for the government so such efforts have been largely driven by NGOs. Community members and many NGOs have only limited capacity to engage in the implementation process. Moreover, there are reports that the government has been delimiting only the areas used by communities for subsistence purposes, thus excluding broader areas, including forests (De Wit & Norfolk, 2010; interview of Chris Tanner).

The Land Law is generally interpreted as giving the land rights holder the right to use the land and the resources on the land for subsistence or commercial purposes subject to restrictions on the extraction of resources found in the forest laws.[127] This interpretation stems from the law's treatment of customary rights as formal legal rights and from the requirement that investors obtain the consent of the community or individual rights holder to engage in any activities on the land (De Wit & Norfolk, 2010).

5.3.2 FOREST LAWS

All forestland and forest resources belong to the state. Generally, local communities can use forest resources for subsistence needs without obtaining a license. All other uses of forest resources require the user to obtain a license from the government (Government of Mozambique Forestry Law, 1999).

The Forestry Law establishes three categories of forests: (1) Conservation Forests (sometimes called "forest reserves") located in protection zones such as national parks and zones of historical and cultural use and value; (2) Productive Forests, which are areas with high-value timber and usually made available for timber concessions; and (3) Multiple Use Forests, less productive open-access forests in which most of the people live and on which they depend for subsistence (Government of Mozambique Forestry Law, 1999; Nhantumbo & Izidine, 2009).

[127] Salomao interview; interview of Sean Nazerali, WWF Mozambique, Quirimbas Support, May 31 2011.

TABLE 5.1: FOREST CATEGORIES IN MOZAMBIQUE[128]

Province	Productive Forest (HA's-2007)	Conservation Forest (HA's-2007)	No. of Forest Concessions (2008)	No. of Simple License Holders (2008
Maputo	683,000	138,000	0	9
Gaza	2,422,000	1,357,000	3	66
Inhambane	1,437,000	982,000	12	77
Sofala	1,419,000	1,886,000	27	121
Manica	1,951,000	1,505,000	10	46
Tete	3,340,000	882,000	6	54
Zambezia	4,113,000	951,000	43	98
Nampula	2,317,000	455,000	18	61
Cabo Delgado	3,176,000	1,628,000	31	65
Niassa	6,050,000	3,379,000	6	19
TOTAL	26,908,000	13,163,000	156	616

Protected areas are defined and regulated by the Forestry and Wildlife laws. Many people live in Mozambique's protected areas and use resources located therein for subsistence purposes. Under the law it is not clear whether these settlements and resource uses are legal but the law is generally interpreted as allowing them (De Wit & Norfolk, 2010; Tanner interview).

Other than community subsistence use, "exploitation" of forest resources requires any user—including local communities and individuals—to obtain either a simple license or forest concession. "Exploitation" is defined as the "extraction" of forest products in the 2002 Regulations on the Law on Forestry and Wildlife.

Simple licenses, good for one-year terms, may be obtained by domestic companies or local communities wanting to extract relatively small quantities of specified forest resources for commercial purposes. Because the process for acquiring a simple license is relatively easy and inexpensive, it is the preferred license for most small Mozambican businesses. Many others choose to operate informally (Nhancale et al., 2009; USAID, 2010b).

Forest concession contracts are issued for 50-year terms for large scale timber and non-timber forest product (NTFP) production. The process is far more expensive and complex than is involved in obtaining a simple license. While individuals and communities are eligible for forest concession contracts, most are issued to large companies with the capacity to operate in areas of 100,000 hectares or more (Nhancale et al., 2009; USAID, 2010b).

[128] Derived from Table 2 in DeWit & Norfolk 2010, p.5. Reliable figures for the amount of Multiple Use Forests in Mozambique could not be obtained.

Consistent with the Land Law, companies seeking to exploit forest resources on community land are required by the Forestry Law to consult with the communities as a condition of obtaining either a simple license or forest concession contract. The simple license process clearly requires the applicant to obtain the consent of the land rights holder, which, under the Land Law will often be the local community (Regulations on the Law on Forestry and Wildlife, 2002). However, while requiring consultation, the law does not explicitly require local community consent to forest concession contracts. Thus, it is not clear whether communities have the right to decline the larger investments that such contracts entail.[129] Practically speaking, communities are unable to say no to an investor that wants to acquire the rights to forest resources and has effectively obtained government approval.[130]

In sum, forest resource use rights of individuals and local communities in Mozambique are limited to subsistence uses. The state recognizes no other customary or inherent rights to the resources, in contrast to the Land Law's treatment of land use rights (De Wit & Norfolk, 2010).

5.4 MOZAMBIQUE'S EMERGING REDD+ STRATEGY

Mozambique participates in the World Bank's Forest Carbon Partnership Facility (FCPF). It also receives support from Brazil under an arrangement called South-South REDD: A Brazil-Mozambique Initiative, with technical assistance from Norway (Wertz-Kanounnikoff et al., 2011).

Mozambique has yet to complete its REDD+ strategy. The government submitted its Readiness Plan Idea Note (R-PIN) in 2008.[131] The country prepared a draft strategy before beginning a Readiness Preparation Proposal (R-PP). On the advice of the World Bank, work on the strategy will slow while the R-PP is drafted. The government plans to expand its efforts to consult with local communities. As a result, Mozambique now aims to complete and adopt its REDD+ strategy by August 2012.[132]

There are two functioning REDD+ pilot projects in Mozambique, both operated by Envirotrade and discussed in the next section. In addition, the Society for the Management of Niassa Reserve and Fauna and Flora International are in the advanced stages of preparing another project located within the Niassa National Reserve.[133] Moreover, WWF is exploring possible REDD+ projects in Quirimbas National Park and in the mangrove forests of the Zambezi Delta.[134] Finally, Green Resources Inc. is developing a project in Niassa Province.[135]

Mozambique has not determined how it will define or assign carbon rights. Its draft strategy includes the following objectives:

- Approve an instrument that makes explicit the property for environmental services, particularly the carbon rights.
- Strengthen the right of land use and environmental services for rural communities (Draft National REDD+ Strategy).

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129 Regulations on the Law on Forestry and Wildlife, Articles 26(e) requires local authorities to declare that local communities have a "favourable opinion" of the application. Article 36(3) states that required consultation with the community must result in "decisions by consensus of the community members present…." Article 17 of the Forestry Law requires only a "hearing or renegotiation with the local communities." Some commentators flatly believe that communities have no power to veto concession contracts. See, e.g., Pia Katila. "Devolution of Forest-Related Rights: Comparative Analyses of Six Developing Countries" at 87. Tropical Forestry Reports 33. University of Helsinki. 2008.

130 Interview of Aldo Salomao

131 See http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/ Mozambique_R-PIN_Revised_Feb_2009.pdf.

132 Alima Issufo Taquidir interview.

133 Interview with Madya Couto, Society for the Management of Niassa Reserve, June 1 2011.

134 Nazerali interview.

135 Details can be found at: http://www.greenresources.no/Portals/0/Carbon/Sanga.pdf.

Despite these stated objectives, some observers believe that the Mozambique government will do its best to keep forestland out of the hands of local communities.[136] How this situation will play out remains to be seen. However, as discussed more fully below, if the government wishes to achieve the objectives set forth in the draft REDD+ strategy, it should take steps to harmonize the relevant provisions of the Land Law and Forest and Wildlife Law so as to make clear that those with use rights under the Land Law are entitled to receive benefits from forest products on their land, subject to reasonable restrictions on the extraction of such products.

5.5 REDD+ BENEFIT DISTRIBUTION

Mozambique has not settled on its REDD+ benefit-sharing mechanism. Some observers believe Mozambique will adopt a PES system aimed at slowing shifting cultivation practices which result in the annual burning of a huge amount of Mozambique's forest (Wertz-Kanounnikoff et al., 2011), while others stress that the mechanism that will be used has not yet been determined.[137]

Whichever benefit-sharing mechanism is adopted, a number of interviewees stated that REDD+ revenues are likely to flow first through an undefined national institution.[138] Entitlement to REDD+ benefits at the local level will probably not only lie with communities that control forests where emissions reductions or removals are occurring, but some proportion of the benefits will also be shared with communities that do not have forests on their lands. The government is concerned that if all benefits are directed to forest communities, and excludes non-forest communities, it could create conflicts. This approach reflects a desire to provide incentives to those communities so as not to undermine efforts by their neighbors to protect nearby forests.[139]

The percentage of REDD+ revenues to be allocated to local communities has not been determined. The draft REDD+ strategy states that communities should receive 80 percent of REDD+ revenues.[140] According to one unconfirmed report, the government, international NGOs and other stakeholders have been discussing the allocation of 60 percent of REDD+ revenues benefits to communities.[141]

5.5.1 TWENTY PERCENT REVENUE SHARING MODEL

Mozambique may model its system on its current law (the *Regulations on the Law on Forestry and Wildlife*) which distributes 20 percent of timber taxes and royalties collected from park entry fees, hunting fees and forest concessions on timber harvested from community lands to local communities.[142] This program has been implemented slowly as communities have found it difficult to participate, in part because they must form a new institution and obtain a bank account (Wertz-Kanounnikoff et al., 2011). The central government collects the revenues and then pays a portion of it to the provincial governments which in turn are supposed to make payments to local communities.[143] Many communities are still owed substantial amounts of money under the program (Wertz-Kanounnikoff et al., 2011; De Wit & Norfolk, 2010).

For those communities that have received payments, questions have arisen concerning the expenditure of those funds. In some cases, funds have not been invested well because communities lack knowledge and experience in managing cash-based projects. There are also reports of funds being misappropriated by local elites (Wertz-Kanounnikoff et al., 2011; Rein interview).

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136 Tanner interview.
137 Interview with Duncan McQueen, IIED, May 29 2011
138 E.g., Rein interview, Alima Issufo Taquidir interview
139 Interview with Paula Panguene, Deputy Director for Environment Management, Ministry for the Coordination of Environmental Affairs, Government of Mozambique, June 6 2011.
140 Interview of Dr. Sheila Wertz-Kanounnikoff, Senior Associate, Forests and Governance Program, CIFOR, June 1 2011.
141 Interview with Robert Layng, Tourism and Biodiversity Manager and Mission Environment Officer, USAID Mozambique, May 31 2011.
142 Taquidir interview.
143 Layng interview.

Another significant difficulty arises when making payments to communities for timber harvested from community land that has not been delimited. According to De Wit and Norfolk (2010) "the payment to communities… depends upon also having a clear spatial definition of the area over which a community can legitimately claim underlying resource rights." This problem will emerge if Mozambique attempts to distribute REDD+ benefits linked to specific amounts of emissions avoided from, or carbon sequestered in, community lands since it will be essential to clearly demarcate the boundaries of those lands.

5.5.2 NHAMBITA

Another potential model for Mozambique or, perhaps more likely, one component of a benefit sharing model, is the one utilized in Envirotrade's Nhambita Community Carbon Project. This project has made payments to about 3,000 individual households and 20 communities that have taken actions resulting in measurable additional carbon sequestration or emissions avoided on their land either through planting trees on smallholdings or protecting forests on large community lands. Certified under the Plan Vivo standard for designing and certifying programs where communities are engaged in providing payments for environmental services (PES),[144] the Nhambita project, together with its more recently established sister project in the Zambezi Delta, appear to be the only REDD+ projects in Mozambique that are providing tangible benefits to participants both in the form of carbon payments and training on sustainable farming practices.[145]

In the Nhambita project, Envirotrade helped communities to delimit and register their land. The company relied on the communities to verify the boundaries of plots held by individuals. Smallholders receive seedlings and technical assistance on how to improve the productivity of their farmland while reducing emissions and sequestering carbon. A farmer who complies with an agreed land use plan receives a share of revenues paid to Envirotrade for the sale of carbon credits based on the predicted amount of carbon emissions to be avoided or sequestered on the farmer's plot over a 99 year period. Approximately 30 percent of the individual contractors are women, both married and single, although there are no women serving on the Nhambita community association. The company must engage in monitoring to determine the amount of additional carbon stored on each plot.[146]

Revenues are supposed to be divided evenly between the land rights holder (either community or individual farmer), Envirotrade's operating costs and Envirotrade's marketing costs. However, in the case of individual farmers (as opposed to larger, community-held forests) revenues have not been sufficient to cover marketing costs so these are being covered from other revenue sources. To date, revenues from carbon sales have been shared equally between farmers and operating costs. [147]

Even though benefits are accruing to the beneficiary households, Envirotrade has determined that it is simply too expensive to administer more than 3,000 contracts with individual smallholders. As a result, the company has decided to limit its future contracts to communities with at least 100,000 hectares of forestland.[148] This experience may lead the government to shun a system requiring payments to individual or small community rights holders due to the high transaction costs that such a mechanism will entail.

5.6 CARBON RIGHTS UNDER MOZAMBIQUE LAW

Mozambique's Draft National REDD+ Strategy calls for "an instrument" to determine carbon rights. This declaration is important because current law does not implicitly establish those rights or otherwise determine

[144] See http://www.planvivo.org/.

[145] Interview of Alastair MacCrimmon, Sofala Project Manager, Envirotrade, June 3 2011; Nazerali interview. See, also the project summary and annual reports available online at http://www.planvivo.org/projects/registeredprojects/nhambitita-community-carbon-mozambique/.

[146] MacCrimmon interview.

[147] MacCrimmon interview.

[148] MacCrimmon interview.

who has a right to REDD+ benefits. Inconsistencies in existing law with respect to the right to benefit from forest resources make such an instrument or changes to current law essential.

In the context of REDD+, the most important inconsistency is between the Land Law and the Forestry Law and regulations. As explained above, the Land Law appears to give communities rights to natural resources on their land subject to forest law restrictions that prevent the extraction of forest products. Under the Forestry Law, however, forest products remain the property of the state. The state does not relinquish any right to use these products to anyone, except for subsistence use by local community members, unless a user obtains a simple license or forest concession contract (De Wit & Norfolk, 2010; Katila, 2008).

"Exploitation" is defined as the "extraction" of forest products. This definition would seem to exclude carbon as there is no "extraction" by any reasonable definition of the word. Read alone, this statement suggests that the person holding rights to land with forests on it would not need a license or contract to receive REDD+ benefits as preserving or enhancing stored forest carbon cannot reasonably considered to be "extraction" of a forest product. If the Land Law prevails, local communities probably have the right to benefit from sequestered carbon. However, the fact that the forest laws are generally interpreted to preclude communities from receiving any commercial benefit from forest resources suggests that local communities may not have a legal right to receive such benefits (De Wit & Norfolk, 2010).

Even if the law is interpreted as giving the carbon right to communities, those rights may be lost by virtue of a community's practical inability to derail forest concession contracts. If the government interprets stored carbon as a forest product, an interpretation that would be inconsistent with the definition of the term, investors may well seek concession contracts for huge swathes of forest in order to reap REDD+ benefits.

In sum, under the Land Law, holders of land use rights appear to hold the right to benefit from reduced emissions and carbon stored on the land. The Forestry Law and regulations, as applied to REDD+ activities, appear to dictate otherwise. They must be harmonized to support realization of the necessary level of rights clarity.

5.7 SOCIAL AND ENVIRONMENTAL IMPACTS

As in the other study countries, it is too soon to predict the social and environmental impacts of REDD+ on forest communities because the REDD+ strategy and benefit-sharing mechanism have yet to be determined. If the mechanism includes a component similar to the Nhambita model, local communities and individuals could reap real benefits. In Nhambita, individual farmers have realized significant benefits in the form of cash payments, livelihood assistance and increased agricultural productivity.[149] There appear to be measurable environmental benefits, too, in increased sequestered carbon and tree cover. The challenge will be to find a way to reduce transaction costs so that it is feasible to share performance-based benefits directly with smallholders. The community has received payments from carbon credit revenues linked to carbon stored on community-held forestland. The Nhambita community association has invested the funds to construct two schools, thus presumably benefiting the community as a whole.[150]

If the mechanism incorporates the 20 percent forest revenue sharing system, problems of local institutional capacity, corruption and elite capture must be addressed. In addition, many of the community associations are not representative of the community at large. For example, women frequently are not allowed to participate, contrary to legal requirements.[151]

By law, Mozambican women have equal rights to land. As a practical matter, however, customary law and traditional practices result in few women that have secure rights to land. Moreover, women rarely play a

[149] MacCrimmon interview; interview with Nhambita village farmer/contractor, June 3 2011.
[150] Interview with members of the Nhambita community association, June 3 2011.
[151] Salomao interview.

meaningful role in local governance bodies, although women are far more influential at the national government level.[152] The Draft National REDD+ Strategy has little to say about the impact of REDD+ on women.

5.8 SUGGESTED CHANGES IN LAW AND PRACTICE

If Mozambique decides to apply existing law to determine the holder of carbon rights, the best way to protect local communities is to anchor such rights to the Land Law.[153] It may be possible to do this by amending applicable provisions of the Forestry Law and regulations to make clear that land rights holders hold the right to receive commercial benefits from forest products on their land where the receipt of such benefits do not require the extraction of such products. A new carbon rights law could achieve the same objective.

In addition, if communities are to receive benefits tied to their performance in emissions reductions or carbon sequestration, it will be important to improve the quality and accelerate the pace of community land delimitations with perhaps a particular emphasis on community land with large forests. Presently, the government has a goal of 50 community delimitations per year.[154] Increasing this number should be a high priority for the government in order to improve implementation of the Land Law, facilitate an effective REDD+ benefit sharing process and to more effectively administer the 20 percent revenue sharing mechanism under the Forestry Regulations. As many have observed, local communities and local governments often lack the capacity to engage in the process of delimitation and registration.[155] Donors and the government alike should consider whether or not REDD+ readiness funds should be used to support community land delimitation.

Communities also need to improve their ability to negotiate with prospective investors seeking to obtain rights to conduct commercial activities on community land or with REDD+ project developers, such as Envirotrade. If Mozambique ties the right to REDD+ benefits to land use rights, communities may well find themselves engaging with firms that want to obtain land use rights in order to make them eligible for REDD+ benefits. Communities will need substantial assistance to reach the point where they can effectively participate in such negotiations.

If Mozambique wants its REDD+ system to succeed it must share benefits in a way that incentivizes individuals and communities to stop burning large portions of the country's surface each year. The model under which communities receive 20 percent of revenues is unlikely to help achieve that goal, unless communities receive a far higher percentage share and find it easier to receive payments.

Moreover, in light of the difficulties it has faced in implementing the 20 percent forest and wildlife revenue sharing program, the government of Mozambique should give serious consideration to using a different benefit-sharing mechanism than the 20 percent system. This mechanism is too complex and makes it too difficult for communities to receive payments (Nhantumbo & Izidine, 2009). Some version of the Nhambita model should be considered, although payments at the individual household level may involve unsustainable transaction costs. The transaction cost problem possibly could be addressed by assigning local communities the responsibility for managing contracts with individual households if the communities can administer the contracts more efficiently.[156]

The potential impact of REDD+ implementation on women has yet to be addressed in any significant way.[157] By law, women have equal rights to land and resources in Mozambique. However, women's access to land

[152] Panguene interview; Salomao interview
[153] McQueen interview.
[154] Tanner interview.
[155] Tanner interview
[156] Salomao interview.
[157] Interview with Oystein Botillen, First Secretary, Royal Norwegian Embassy, Maputo, June 1 2011.

and security of tenure is largely governed by traditional practices and customary law. The result is that women rarely have land titled in their name and often have little input into local decision-making.[158] Women sometimes are able to participate in the community institutions established to receive and invest the funds received under the 20 percent revenue sharing program. If these institutions are used in the nation's REDD+ benefit-sharing mechanism, then this approach could be an opportunity with which to encourage further participation by women.

[158] Salomao interview

MOZAMBIQUE CASE STUDY ANNEX A: LIST OF INTERVIEWS

Type of Organization	Organization Name	Contacts Interviewed & Title
Government	Mozambique Ministry of Agriculture, National Directorate of Lands and Forests	Mikal Rein, Community Based Natural Resource Management Expert for Mozambique
	Mozambique Ministry of Agriculture, National Directorate of Lands and Forests	Alima Issufo Taquidir, Head of Department
	Ministry for the Coordination of Environmental Affairs, Government of Mozambique	Paula Panguene, Deputy Director for Environment Management
Village Government	Nhambita Community Association	Several members
Local Civil Society	Society for the Management of Niassa Reserve	Madya Couto
	Iniciativa para Terras Comunitarias (ITC)	Joaquim Langa, Sergio Ye, Jose Monteiro
	Director General, Centro Terra Viva	Alda Salomao
	Centro Terra Viva	Carlos Serra
International Institutions	Food and Agriculture Organization of the UN (FAO)	Chris Tanner, Senior Technical Advisor on Land and Natural Resources Legislation
	Gorongosa Restoration Project	Marty Sampson, Technical Advisor, Jessica Greenston, Legal Counsel
Bilateral Agencies	USAID Mozambique	Robert Layng, Tourism and Biodiversity Manager and Mission Environment Officer
	Royal Norwegian Embassy, Maputo	Oystein Botillen, First Secretary
International NGOs	IIED	Duncan McQueen
	IIED	Dr. Sheila Wertz-Kanounnikof, Senior Associate, Forests and Governance Program
	WWF Mozambique	Sean Nazerali, Quirimbas Support
Private Firms	Envirotrade	Antonio Serra, Country Manager
	Envirotrade	Alastair MacCrimmon, Sofala Project Manager
	Envirotrade	Aristides Muhate, Country Carbon Inventory Manager

REFERENCES

Acharya, K. P. (2005). Improving the effectiveness of collective action: Sharing experiences from community forestry in Nepal. CAPRI Working Paper No. 54. Washington, D.C.: International Food Policy Research Institute.

Acharya, K., Dangi, R., Tripathi, D., Bushley, B., Bhandary, R. & Bhattarai, B. (2009). Ready for REDD? Taking stock of experience, opportunities and challenges in Nepal. Nepal Foresters' Association: Kathmandu, Nepal. Available at: http://www.forestrynepal.org/publications/book/4759.

Aguilar, M. (2009). Wildlife legislation and the empowerment of the poor in Latin America. FAO Legal Papers Online #80. Rome: UN Food and Agriculture Organization.

Anaya, S. and Williams, Jr., R. (2001). "The Protection of Indigenous Peoples' Rights over Lands and Natural Resources under the Inter-American Human Rights System." Harvard Human Rights Journal / Vol. 14, Spring 2001. Available at http://www.law.harvard.edu/students/orgs/hrj/iss14/williams.shtml#Heading263

Angelsen, A. (2009). Realizing REDD+: National strategy and policy options. Bogor: Center for International Forestry Research.

Anta Fonseca, Salvador. (2004). Forest Certification in Mexico. Draft paper presented at Forest Certification in Developing and Transitioning Societies: Social, Economic, and Ecological Effects Symposium, 10–11 June, New Haven, Connecticut.

Askham, B. (2010). REDD pilot projects in Indonesia. Ecos Magazine. Available at: http://www.ecosmagazine.com/?paper=EC10048

Australia Indonesia Partnership. (2010). Kalimantan forests and climate partnership: A case study. Available at: http://www.climatechange.gov.au/government/international/finance/~/media/publications/international/FAST_may.pdf

Bampton, J. F. R., Ebregt, A., and Banjade, M.R. (2007). Collaborative forest management in Nepal's Terai: Policy, practice and contestation. Journal of Forest and Livelihood, 6(2).

Barkin D. and Miguel Angel García, M.A. (N.D.) The Social Construction of Deforestation in Mexico: A case study of the 1998 fires in the Chimalapas Rain Forest. World Rainforest Movement. Available at: http://www.wrm.org.uy/deforestation/NAmerica/Mexico.html

Barry, D., Bray, D., Madrid, S., Merino, S. and Zuniga, I. (2010). Sustainable forest management as a strategy to combat climate change: Lessons from Mexican communities. Mexico City: Consejo Civil Mexicano para la Silvicultura Sostenible. Mexico City. Available at: http://sitemaker.umich.edu/ifri/files/sustainable_forest_management_as_a_strategy_to_combat_climate_change-_lessons_from_mexican_communities.pdf

Benneker, C. & McCall, M. (2009). Are existing programs for community based forest management and conservation suitable REDD strategies? A case study from Mexico. Available at: http://www.communitycarbonforestry.org/NewPublications/ETFRN%20Paper%20C%20Benneke.pdf

Birdlife International. (2010). Restoration model set to transform Indonesia's forest sector. Available at: http://www.birdlife.org/news/news/2010/06/second-licence-concession-for-harapan.html.

Blanco, S. A. & Mojarro, P. (N.D.) La democracia interna en el ejido. Procuraduría Agraria, Gobierno de México. Available at: http://www.pa.gob.mx/publica/pa070408.htm.

Brown, J. (2004). Ejidos and comunidades in Oaxaca, Mexico: Impact of the 1992 reforms. Rural Development Institute Reports on Foreign Aid and Development, No. 120. Seattle: Landesa.

Burung Indonesia. (2008). Reversing the trend of natural forest depletion. Available at: http://forestclimatecenter.org/files/2008-11-14%20Jambi%20%28Ecosystem%20Restoration%20in%20Production%20Forests%29%20by%20BirdLife.pdf.

Cooperativa Ambio. (2011). http://www.ambio.org.mx/site/index.php?option=com_content&view=article&id=2&Itemid=19&lang=en Accessed April 11 2011.

Corbera, E., Estrada, M., May, P., Navarro, G., and Pacheco, P. (2011). Rights to land, forest and carbon in REDD+: Insights from Mexico, Brazil and Costa Rica. Forests 2(1): 301-342.

Costenbader, J. (2009). Legal Frameworks for REDD: Design and Implementation at the National Level. IUCN Policy and Law Paper No. 77. Gland, Switzerland.

Cotula, L. & Mayers, J. (2009). Tenure in REDD: start-point or afterthought? London: IIED. Available at: http://pubs.iied.org/13554IIED.html

De Wit, P. and Norfolk, S. (2010). Recognizing rights to natural resources in Mozambique. Washington, D.C.: Rights and Resources Initiative. Available at: http://www.rightsandresources.org/documents/files/doc_1467.pdf

Fogerty, D. (2010). Special report: Making forests pay in a warming world. Reuters. Available at: http://www.reuters.com/article/2010/12/03/us-climate-deforestation-idUSTRE6B21UB20101203

Forest Act of Nepal. (1993). Official Translation made in 1995, Available at http://www.forestrynepal.org/images/Forest_Act_of_Nepal_1993.pdf .

Forest Carbon Partnership Facility. (2011). REDD readiness project fact sheet: Country-Indonesia. Available at:http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/Jun2011/FCPF%20REDD%20Readiness%20Progress%20Sheet_Indonesia_June%202011.pdf

FSCC. (2003). Framework for Collaborative Forest Management in Nepal: February 2003. FSCC-Collaborative Management Working Group. Available at http://www.docstoc.com/docs/37663122/Collaborative-Forest-Management-Policy

Galudra, G., van Noordwijk, M, Suyanto, S. and Pradhan, U. (2010). Hot spots of confusion: Contested policies and competing carbon claims in the peatlands of central Kalimantan, Indonesia. ASB Partnership for the Tropical Forest Margins Policybrief 21. Available at: http://www.worldagroforestry.org/sea/Publications/files/policybrief/PB0017-11.PDF.

General Sustainable Forest Management Law. Official Journal of Mexico. (25 February 2003 [including amendments until 24 November 2008]). Available at: http://www.diputados.gob.mx/LeyesBiblio/pdf/259.pdf

Government of Mexico. (2010). Mexico's Vision for REDD: Towards a National Strategy. English version (introduction only). Available at: http://www.conafor.gob.mx:8080/documentos/docs/7/1654Mexico%27s%20Vision%20for%20REED.pdf. Spanish version (complete document): http://www.conafor.gob.mx:8080/documentos/docs/7/1393Visi%C3%B3n%20de%20M%C3%A9xico%20sobre%20REDD_.pdf.

Government of Mexico. (2010b). Readiness Preparation Proposal submitted to the Forest Carbon Partnership Facility (February 2010). Available at: http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/Mar2010/Mexico_120211_R-PP_Template_with_disclaimer.pdf

Government of Mozambique. (2010). Estrategia Nacional de Reducao de Emissoes por Desmatamento e Degradacao (Mozambique Draft REDD Strategy).

Government of Nepal. (2000). "Forestry Sector Policy 2000". Available at: http://forestaction.org/im/images/stories/Forestry_Sector_Policy_2000.pdf.

Government of Nepal. (2010).National Strategy (Interim) For Reducing Emissions from Deforestation and Forest Degradation (REDD) Plus in Nepal, Issued by REDD Forestry and Climate Change Cell. Available at http://nepal.usaid.gov/downloads/all-downloads/category/10-business-opportunities.html?download= 167%3Aredd-strategy-25072010-final-draft.

Government of Nepal. (2010). Nepal Readiness-Preparation Proposal (R-PP).Available at: http://www.forestcarbonpartnership.org/fcp/node/75.

Government of Norway. (2011). "Norway-Indonesia REDD+ Partnership-Frequently Asked Questions." Available at: http://www.norway.or.id/Norway_in_Indonesia/Environment/-FAQ-Norway-Indonesia-REDD-Partnership-/.

Government of Tanzania. (2010). (Draft) National Strategy for Reduced Emissions from Deforestation and Forest Degradation (REDD+).

Government Regulation of the Republic of Indonesia. (2007). Number 6 Year 2007 on Forest Arrangement and Preparation of Forest Management Plan and Forest. Available at: http://redd.pbworks.com/f/2007+PP+6+Tentang+Tata+Kelola+&+Pemanfaatan+Hutan+English+version.pdf

Government of Indonesia. (2008). "A Guide to the Concession Licensing and Management of Ecosystem Restoration." Available at: http://forestclimatecenter.org/files/2008-10%20Jambi%20%28A%20Guide%20to%20the%20Concession%20Licensing%20and%20Management%20of%20Ecosystem%20Restoration%29%20by%20BirdLife%20and%20Ministry%20of%20Forestry.pdf

Government of Indonesia. (2008a). Ministry of Forestry Decree No. P.68/Menhut-II/2008, Reg. Ch. II, Article 2(1).

Government of Indonesia. (2009). Ministry of Forestry Decree P.30/Menhut-II/2009, Articles 4 20(1) and 22(1).

Government of Indonesia. (2009a). Ministry of Forestry Decree P.36/Menhut-II/2009, paragraph 3 and Attachment III.

IFCA. (2007). Payment mechanisms, distribution and institutional arrangements. Indonesian Forest Climate Alliance (IFCA), Jakarta, Indonesia

Kaimowitz, D. et al. (2010). Forest Carbon Partnership Facility-Mexico 2010 Readiness Preparation Proposal Review. World Bank. Washington, DC.

Kanel K. and Kandel B. (2004). Community forestry in Nepal: achievements and challenges. Journal of Forest and Livelihood 4(1):55-63.

Laltaika, Elivuraha I. (2009). A Review of the Tanzania Investment Act in the Light of Pastoralist Livelihood Systems, Report Prepared for the Tanzania Pastoralist and Hunter-Gatherer Organization (TAPHGO)

Available at http://taphgo.org/blog/wp-content/plugins/wp-publication-archive/includes/openfile.php?file=http://taphgo.org/blog/wp-content/plugins/download-monitor/download.php?id=70.

Lang, C. (2009). REDD concerns deepen in Indonesia. REDD-Monitor.org. Available at: http://www.redd-monitor.org/2009/10/06/redd-concerns-deepen-in-indonesia/

Lang, C. (2011a). Indigenous peoples' organization demands 'immediate moratorium' on REDD+ in central Kalimantan. REDD-Net.org. Available at: http://www.redd-monitor.org/2011/06/22/indigenous-peoples-organisation-demands-immediate-moratorium-on-redd-in-central-kalimantan/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+Redd-monitor+%28REDD-Monitor%29.

Lang, C. (2011b). Kalimantan forests and climate partnership faces yet more criticism. REDD-Net.org. Available at: http://www.redd-monitor.org/2011/06/23/kalimantan-forests-and-climate-partnership-faces-yet-more-criticism/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+Redd-monitor+%28REDD-Monitor%29.

Lang, C. (2011c). Guest post: Women remain outside the global forest estate. REDD-Net.org. Available at: http://www.redd-monitor.org/2011/08/11/guest-post-women-remain-outside-the-global-forest-estate/#more-9256.

Letter of Intent between the Government of the Kingdom of Norway and the Government of the Republic of Indonesia. (2010). Cooperation on reducing greenhouse gas emissions from deforestation and forest degradation. Available at: http://www.redd-monitor.org/wordpress/wp-content/uploads/2010/05/Norway-Indonesia-LoI.pdf.

Lungren, C., Sommerlatte, M., and Mlingwa, C. (2000). Policy guidelines for game farming and game ranching in Tanzania. Prepared for The Wildlife Division of the Ministry of Natural Resources and Tourism The United Republic of Tanzania and USAID/Tanzania–EPIQ GTZ-CBC Project.

Mangkusubroto, K. (2011). Address by the Head of Indonesia's President's Delivery Unit for Development Monitoring and Oversight, to International Conference on Forest Tenure, Governance and Enterprise, July 12 2011. Available at: http://www.rightsandresources.org/documents/files/doc_2483.pdf

Neilson, J. (2010). "Who Owns the Carbon? Indonesia's Carbon Stores Spark International Attention." Inside Indonesia. August 16 2010 Available at: http://www.insideindonesia.org/stories/who-owns-the-carbon-05091343.

Nhancale, B., Mananaze, S., Dista, N., Nhantumbo, I. and Macqueen, D. (2009). Small and medium forest enterprises in Mozambique. Edinburgh: IIED. Available at: http://pubs.iied.org/13546IIED.html.

Nhantumbo, I. and Izidine, S. (2009). Preparing for REDD in dryland forests: Investigating the options and potential synergy for REDD payments in Miombo eco-region. IIED.

Operational Guidelines for Forest Carbon Trust Fund. (2011). Available at http://communityredd.net/wp-content/uploads/2011/06/REDD-FCTF-Operational-Guidelines-English.pdf.

Operational Rules for ProArbol Programme. (2011). Available at: http://www.dof.gob.mx/nota_detalle_popup.php?codigo=5172994. Accessed May 22 2011.

Paudyal, D. (2007). Collaborative forest management in Nepal: Stepping towards managing productive forests of Terai with social inclusion. The Initiation. 1:65-71.

REDD-Net East Africa. Visioning REDD+ in East Africa: a focus on benefit sharing in Uganda and Tanzania. Bulletin Issue 01, December 2009. Available at: http://redd-net.org/files/VisioningREDDinEastAfrica-benefitsharinginUgandaandTanzania.pdf

Robles, F. (2011). Carbon rights in REDD+: The case of Mexico. REDD-Net. Available at: http://redd-net.org/files/Mexico%20case%20study%20final.pdf

Takacs, D. (2009). Forest carbon: Law and property rights. Conservation International: Arlington, VA. Available at: http://www.conservation.org/Documents/CI_Climate_Forest-Carbon_Law-Property-Rights_Takacs_Nov09.pdf

Tanzania Forest Conservation Group and Mjumita. (2011). A one-step guide to making the national REDD strategy more pro-poor. Available at: http://www.tnrf.org/files/MJUMITA%20and%20TFCG%20Policy%20Brief%20on%20Land%20Issues%20and%20REDD.pdf

Tanzania Forestry Working Group. (2009). Recommendations for the national strategy on reduced emissions from deforestation and degradation (REDD)-Information brief. December 2009.

Tanzania Ministry of Lands and Human Settlement Development. (2011). Available at: http://www.ardhi.go.tz/land-delivery-services.html (accessed June 13 2011).

Tropical Forests and Climate Change Adaptation (TFCCA). Forest Ecosystems-Indonesia. CIFOR. Available at: http://www.cifor.org/trofcca/_ref/asia/reginfo/foreco.htm&mn=trofcca_0_1.

UNDP. (2004) Human Development Report of Nepal, Kathmandu. Available at: http://origin-hdr.undp.org/en/reports/nationalreports/asiathepacific/nepal/nepal_2004_en.pdf

UN-REDD Program. (2010). Indonesia's national REDD+ strategy. UN-REDD Programme Newsletter, September 2010. Available at: http://www.un-redd.org/Newsletter12/Indonesia_National_REDD_Strategy/tabid/5533/Default.aspx.

USAID. (2010a). USAID Country Profile on Property Rights and Resource Governance: Tanzania. Available at: http://usaidlandtenure.net/usaidltprproducts/country-profiles/tanzania/tanzania-country-profile

USAID. (2010b). USAID Country Profile on Property Rights and Resource Governance: Mozambique. Available at: http://usaidlandtenure.net/usaidltprproducts/country-profiles/mozambique/mozambique-country-profile

USAID. (2011a). Country Profile on Property Rights and Resource Governance: Mexico. Available at: http://usaidlandtenure.net/usaidltprproducts/country-profiles/mexico/mexico-country-profile.pdf

USAID. (2011b). Country Profile on Property Rights and Resource Governance: Indonesia. Available at: http://usaidlandtenure.net/usaidltprproducts/country-profiles/indonesia/indonesia-country-profile.

USAID. (2011c). Country Profile on Property Rights and Resource Governance: Nepal. Available at: http://usaidlandtenure.net/usaidltprproducts/country-profiles/nepal/nepal-country-profile.

Varela, J. and Cruz, A. 2007. El Procede y su impacto en la toma de decisiones sobre los recursos de uso común. Instituto Nacional de Ecología, Gobierno de México. Available at: http://www2.ine.gob.mx/publicaciones/gacetas/464/procede.html.

Wertz-Kanounnikoff, S., Sitoe, A., and Salomao, A. (2011). Infobrief: How is REDD+ unfolding in Southern Africa's dry forests? CIFOR. Available at: http://www.cifor.org/publications/pdf_files/infobrief/3402-infobrief.pdf

Wilder, M., Devine, L., and Curnow, P. Indonesia's REDD regulations. Baker & McKenzie Client Alert. May 2009. Available online. URL: http://bakerxchange.com/ve/ZZ8180r757260609199P803.

Wildlife Conservation Society of Tanzania. (2010). The feasibility of establishing a carbon forestry project in the Selous-Niassa Wildlife Protection Corridor. Government of Tanzania Ministry of Natural Resources Wildlife Division.

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