Institutions and Initiatives in Three Forest Areas in Chiapas: Implications for Scaling-up REDD+

Working Paper
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1 EXECUTIVE SUMMARY

The Center for Clean Air Policy, in collaboration with in-country top government officials and non-governmental organizations, has worked since 2008 on forestry issues and REDD+ policy development in Mexico. At the national level, CCAP has partnered with Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT) and the Comision Nacional Forestal (CONAFOR) to provide recommendations for the establishment of a national REDD+ strategy, including integrating all land and forest use into one plan, ensuring public access for inventory data, strengthening community and social structures. At the state level in Chiapas, CCAP has partnered with the state environment agency, Secretaria Medio Ambiente, Vivienda, y Historia Natural (SEMAVIHN) and Conservation International on an effort to identify and document several innovative sustainable forest management models and community engagement initiatives already in place at the local level.

This analysis presents some insights from research conducted by CCAP for Mexico in 2010. In light of the national REDD+ strategy currently being developed by CONAFOR (National Forest Commission) and SEMANART (Secretary of Environment and Natural Resources), this report aims to elicit lesson from existing activities, case-studies, and efforts in key forested areas within the state of Chiapas to support the development of Mexico’s national strategy.

The State of Chiapas in Mexico has many institutions and organizations developing and piloting conservation, reforestation, payments for ecosystem services, carbon capture projects, and even detailed baseline studies. In most of these projects increasing forest carbon sinks or reducing emissions—in the sense of formal REDD+ as in climate negotiations—were not the main objective from the starting point. Most were launched as a response to local environmental and social needs, well before Chiapas’ formal discussions about REDD+ as a precise policy option. Regardless, these initiatives form valuable “readiness” and pilot activities with lessons and strategies for state REDD+ planning and implementation. In some cases, they demonstrate a program or project that results in measurable emission reductions or increases in forest carbon sinks. Others are models of innovative government-NGO partnerships with transparent funding to communities.

For this analysis, three target municipalities in Chiapas were chosen as case studies: Ocosingo (which includes the Lacandonia rainforest and the protected areas of Naha and Metzabok), Villaflores (which includes the biosphere reserve La Sepultura), and Motozintla (see table below for details). The activities developed in these municipalities include sequestration and activities with no explicit carbon goals (see table below for details). The lessons from these initiatives can inform policymakers in Mexico of the challenges and opportunities of implementing REDD+ on the ground. Harnessing the power of existing programs in specific areas and promoting synergies among these programs, policies and strategies to target specific drivers is key to efficient and effective implementation of REDD+ in Mexico.

Furthermore, pilot and readiness activities aiming to build local capacities to participate in the future REDD+ mechanism are also underway at the national and sub-national levels. In the state of Chiapas, for instance, the Secretary of Environment, Housing and Natural History (SEMAVIHN) and Conservation International (CI) are collaboratively developing a statewide climate plan with a REDD+ component, with input by the stakeholder working group Una REDD+ Para Chiapas, coordinated by CI’s Tuxtla office. At this stage of Mexico’s REDD+ development at the national level, maintaining close communication between the national and local levels of government is essential, so that the national REDD+ framework provides for a sound state level performance. The national government needs to continue encouraging the progress made at the state level as a combination of decentralized and centralized forest governance to reduce costs and increase efficiency and accountability of forest management activities at the local level.

<table>
<thead>
<tr>
<th>Location</th>
<th>Organizations Involved</th>
<th>Initiative</th>
<th>Challenges and Barriers</th>
<th>Opportunities for REDD+</th>
</tr>
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<tbody>
<tr>
<td>Naha and Metzabok</td>
<td>CONANP (Comisión Nacional de Areas Naturales Protegidas) and AMBIO (Natural Resources Management Cooperative)</td>
<td>• Promoting shade grown coffee by helping ejidos between reserves organize themselves by working with a French fair trade organic certifier and distributor Sposel. • Working on a PlanVivo</td>
<td>• Limited funding • So far there is only carbon quantification in a few PlanVivo sites. • The even distribution of payments among the group irritates high-performers. • Difficult to sustain</td>
<td>• Good potential for reforestation. • Job opportunities at CONANP and as coffee tecnico welcomed by the community. • Empowering women in the region. • Existing efforts could serve as a model for a government</td>
</tr>
<tr>
<td>Location</td>
<td>Agency and Collaboration</td>
<td>Description</td>
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| Sierra Madre Sepultura    | CONANP (Comisión Nacional de Areas Naturales Protegidas), Conservation International and ProNatura-Sur (conservation group) | • CONANP is engaging edijo members through land-use planning, environmental education and technical training  
• CI is working with ejidos within the reserve in a larger scale coffee collaboration with MasCafe and Starbucks  
• ProNatura is helping edijos grow and sell sustainable palm.  
• Most of the pressure comes from within the ejidos as many landholders are expanding their cattle production.  
• This area is highly vulnerable to climate change.  
• Lack of sustainable funding.  
• The success of this initiative varies across edijos. |
| Motozintla                | CONAFOR (Comisión Nacional Forestal) and COFOSECH (Comisión Forestal Sustentable del Estado de Chiapas) | Worked directly with landowners in a variety of government supported programs, including reforestation and payment for environmental services (PES), soil protection and others.  
• Government agencies are not trusted by the communities as much as local NGOs.  
• Farmers are provided with the seedling ex-ante and payments ex-post upon performance so they do not always have access to credit to improve soils and productivity.  
• The capacity built in multiple levels can serve as basis for REDD+ activities. |

Access to REDD+ funds, will require effective coordination of state and national level initiatives to avoid double-counting of emission reductions and ensure compliance with the Cancun Agreement that requests developing country Parties, when developing and implementing their REDD+ national strategies or action plans, to address drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations and the safeguards identified.

**IMPLICATIONS**

- **Building upon success in existing priority areas is a first step towards scaling-up REDD+.** The Chiapas experience can serve as a case study for Mexico, testing the institutional framework at the state level to potentially scale-up to the national level as part of a phased approach as anticipated by the Cancun agreement.

- **Working within existing institutions and initiatives to advance REDD+ pilot projects in Mexico may optimize the implementation of the national strategy.** The Mexican government can target this opportunity by developing an inventory of REDD+ pilot activities at the sub-national level and create partnerships with organizations with proven success developing projects. The use of tools such as a web survey and a checklist for evaluating REDD+ pilot projects will ease this task (and discussions are underway with CONAFOR to compile this registry).

- **State level expansions needs to feed into the emerging federal vision and strategy for REDD+ with guidance by CONAFOR and SEMANART.**

- **Implementation of a scaling-up strategy will require cooperation and coordination between the state and federal government programs as well as NGO-based activities.** Areas such as Motozintla demonstrate that state and federal programs can work well together.

- **The role of municipalities needs to be carefully explored.** As local administrative hubs, the municipalities may be crucial in term of participating in payments distribution, natural resources tenure, and local management issues; However, as officers rotate terms every three years, potential exists for gaps in coordination.
• Implementing organizations must develop a base for cooperation and trust with the local communities. Actively working with communities/ ejidos is essential for the long-term sustainability of REDD+. The process of engaging local landholders includes working with local communities to map the project area, invest in capacity building through workshops, develop a forum of discussions with community members engaging them in awareness exercises, work with and strengthen local community organizations, among others.

• A process for distributing the new sources of finance from REDD+ can build upon existing community associations and enterprises. The government as the recipient of the revenue could select NGOs working with forestry projects as partners and re-invest the funds from REDD+ in these initiatives, based on selection criteria such as a track record of cooperation with diverse stakeholders.

• As the COFOSEC/ CONAFOR projects demonstrate it is also crucial to ensure up-front access to credit to participating landholders that need to feel that the long-term payoff of such investment is worth the initial investments and opportunity costs. It is also crucial to create financial safeguards through traceable models of account management, such as escrow accounts.

• In preparation for REDD+, programs and projects need to seek fund for precise and standardized carbon quantification. As there are multiple activities under development in the same areas, it is key to determine what activities are responsible for the emission reductions and reward them appropriately. Also, transparent and better data flow between the state government and federal agencies is essential.

NEXT STEPS

Examining implications for the “Readiness” phase: This analysis shows the importance of conducting in-depth investigations in areas targeted as key to state-level REDD+ planning and implementation. For example, many such initiatives exist with a high degree of success in terms of environmental outcomes and social inclusion; finding ways to build upon and expand these and coordinating successful efforts could result in more rapid planning and scale-up. Concretely, this could result in more rapid scaling-up of current activities and national REDD+ development – like moving through phases 1 and 2 more quickly. The next step of the CCAP-Mexico REDD+ project and paper series under CCAP’s Forestry and Climate Change Program, will link to the existing readiness and pilot project literature, and suggest implications for national plans.

In the meantime, however, we propose the following steps to be followed to plan for, and implement, REDD+ more quickly by learning from and building off of areas with successful forest and land use related initiatives:

• Research existing initiatives that are already planned as- or could be deemed as readiness, pilot, or demonstration efforts per sub-region.
• Identify successful strategies in that sub-region.
• Build upon and scale-up activities that have succeeded within the sub-region where they already exist, and expand these into regions with similar characteristics where they are likely to work.
• Coordinate different efforts in different parts of the state, combining these to form a shorter-term strategy for REDD+ readiness, planning, for implementation;
• “Fill in” areas of gaps such as carbon quantification, deforestation detection systems, or trained verifiers.

With additional funding, CCAP would like to support the Mexican government efforts to track and evaluate existing and emerging pilot projects and to foster partnerships between the government and local institutions working on REDD+. The lessons learned from the survey can contribute to Mexico’s national strategy for REDD+, and assist Mexico to improve existing projects, suggest areas for expansion of existing activities, and identify new areas to for REDD+ pilots.
2 OVERVIEW

This paper aims to describe REDD-related activities in three key forested areas within the state of Chiapas, highlight efforts from which a state strategy can build upon, and elicit lessons and practical next steps for the emerging Mexican national REDD+ strategy. In the immediate future steps, resources can be deployed to assess existing efforts and possible means of coordination in order to speed up the sub-national readiness process.

The Mexican government is currently undertaking a two-year process to develop its national REDD+ strategy, after having completed the National REDD+ Vision\(^1\) in late 2010 which was announced at COP 16 in Cancun. The government supports a national approach with subnational implementation, Mexico has many ecologically and culturally distinct regions and states. Meanwhile, several states in Mexico are embarking on their own REDD+ initiatives and even statewide climate plans that include forest components. Thus, in Mexico, state-level REDD+ efforts must be compatible with local forestry practices and communities while also while demonstrating accordance with the emerging national vision as well as international principles agreed by the Parties through the Cancun Agreement.

A robust case study of specific forested areas at the local level can support the government in developing a tailored and responsive national REDD+ vision; it can also highlight methods and lessons for use in new areas. Chiapas has many initiatives from which to amplifying REDD+ efforts and lead to a statewide implementation strategy, which it aims to create by the end of the year through its stakeholder committee. Initiatives include efforts by state agencies, federal programs, NGOs, research universities. This analysis takes a first step surveying key actors, existing institutions and efforts in forest use and governance in Chiapas, both NGO and political, focusing in detail on three key forested areas of Chiapas; it highlights programs and strategies that have been effective in certain regions of Chiapas, as well as challenges and opportunities for scaling up.

We suggest that the key to rapid and effective REDD+ implementation will be to harness the power of existing programs in their specific geographic focus areas, and combine/expand these with programs, policies and other strategies designed for specific sectors (sustainable agriculture, improved livestock practices, agro forestry) to target drivers of deforestation and degradation. Effective REDD+ implementation not only requires a sound national strategy to guide the process, but also state specific implementation strategies that are pragmatic and compatible with the national strategy. At this stage in Mexico's REDD+ development process, maintaining close communication between the federal and state level is essential, so that the national REDD+ framework provides for sound state-specific performance.

2.1 Context

Reducing emissions from deforestation and forest degradation-plus (REDD+) is a global priority for sustainable development and mitigation of climate change, and the international community is searching for successful examples of large-scale implementation of REDD+ demonstrating the relationship between national planning and state-level planning and implementation. These examples can serve as models for broader REDD+ implementation in the future. Over the past years, developed countries began to fulfill their 2009 pledges set in motion by the Copenhagen Accord on “fast start” financing for REDD+, which amounts to almost $4 billion to be distributed and used by 2012. The 2010 Cancun Agreements established a set of principles that will determine what REDD+ will look like on an international level. These principles include:

- The full range of forest activities that can help achieve climate mitigation (reducing emissions, sustainable management of forests, enhancement of forest carbon and conservation of forest carbon)
- A requirement that countries work towards a national-level strategy or plan for implementing REDD+. This planning will be part of the first of three phases of full REDD+ implementation.

• Establishment of social and environmental safeguards that must be met, including the full and effective participation of all stakeholders.

• All REDD+ activities will need to be transparently monitored and compared against a reference level. These details are still to be determined, but case studies such as these could help inform this decision.

• Identifying and addressing the drivers.

REDD+ projects at small and medium scales exist in many countries, and a few countries, most notably Brazil, have publicly and transparently monitored their deforestation rates at a national level. While such examples have been heartening, policymakers worldwide recognize that there must be a balance between national REDD+ programs and state level implementation.

Mexico is well-positioned to take advantage of this international momentum. As hosts of the United Nations Framework Convention on Climate Change Conference of Parties in Cancun, Mexico played the pivotal role in creating the Cancun Agreements, during which REDD+ was a key issue. The national Mexican government has established a NGO advisory council on climate change as well as an official government council, which met regularly over the past year. And the federal level, a wide reaching stakeholder committee, the Comite Tecnico Consultivo (CTC) focuses on reducing deforestation and forest degradation-plus and provides input to the government. Mexico participates in multilateral REDD+ forums, such as the FCPF, UN-REDD, and bilateral agreements with Norway, Spain, France, and United States. The national agencies CONAFOR and SEMARNAT will develop the national REDD+ strategy (based on the existing National Vision for REDD+) that will be implemented with state-specific elements. Experiences in Mexico can help fill the knowledge gap of how national policies and state implementation can be blended to efficiently and effectively achieve REDD+.

Chiapas, a state that borders Guatemala, is similarly well-positioned to take advantage of this national and international momentum. In Chiapas, SEMAVIHN (Secretary of Environment, Housing, and Natural History) and Conservation International-Mexico are collaboratively developing a statewide Climate Action Plan. REDD+ forms a key component of this plan, which benefits from a well-organized working group on REDD+ (Una REDD+ Para Chiapas). Many Mexican forest experts consider Chiapas a leader in efforts in forest management that will prepare for REDD+. Chiapas contains institutions, government agencies, and non-governmental organizations (NGOs) that are developing and testing programs for conservation, reforestation, payment for ecosystem services, and carbon capture, and even detailed baselines. In this context, members of the Una REDD+ Para Chiapas, an NGO/government advisory group collaborating with SEMAVIHN, are hopeful that Chiapas could serve as a case study for Mexico. Implementation of a statewide REDD+ strategy can build upon and utilize the advanced progress, successes, and lessons already achieved through both NGO-led project work, NGO-government partnerships, and government sponsored programs operating in high value forest areas within the state.

In light of the national level REDD+ Vision, SEMAVIHN in 2010 requested from CCAP an analysis of actors and institutions involved in forest conservation. These actors and efforts could potentially be involved in REDD+ in Chiapas, and serve as examples for strategies for capacity building and “scaling-up”. The current government of Chiapas has 1.5 years left on the term (state-level governments in Mexico have a six-year term), and the Secretary and Undersecretary of the environment, Lourdes Lopez Moreno and Alejandro Callejas, aim to promote REDD+ until the end of their tenure. The state government faces many challenges such as social inequality, poverty, high levels of deforestation, and extreme vulnerability to climate change and natural hardships such as erosion and flooding. The state government is motivated to pursue REDD+ not only to protect the forests of Chiapas, but also to enhance opportunities for sustainable development for many poor rural communities. The government recently signed in November 2010 a memorandum of understanding with California (USA) and Acre (Brazil), which commits the states to work together with California to develop standards for international REDD+ offsets that may eventually qualify for California’s carbon trading program.

http://www.cambioclimaticochiapas.org/portal/
In the coming year, Chiapas will begin to work with the federal agencies and participate in the national REDD+ stakeholder process, while also continuing to work on their state-level climate plan, the Chiapas Climate Change Action Program, which aims to include climate scenarios, forest baselines, REDD+ plans, adaptation efforts, and eventually other sectors such as waste or transport. In its planning for REDD+, the Chiapas REDD+ stakeholder group was organized into smaller working groups to investigate issues such as a state vision, capacity assessments, plans for MRV, reference levels, outreach and capacity building.

States with ambitious forest management goals like Chiapas face a key difficulty in timing: sub-national planning and implementation is proceeding at the same time as both the development of the national REDD+ strategy and international REDD+ discussions. Due to this parallel timing, subnational regions will not have comprehensive national or international guidelines before beginning their own readiness and implementation efforts. Yet, in the majority of cases, access to REDD+ funds—both national and state levels—will require accordance with the international principles established by the Cancun Agreements, including demonstrating:

- Capacity building assessments and needs, including the “absorptive capacity” of institutions
- Precise knowledge of the drivers of deforestation, the deforestation rate, and baseline information,
- Methods and approaches for measuring, reporting, and verifying (MRV) emissions reductions or carbon sequestration
- True participatory processes among landowners and stakeholders, including of indigenous people
- Proof of transparent management of funds, including of funds reaching landowners on the ground
- A national framework in which state implementation can be encompassed

Efforts at a subnational level should therefore proceed using such guidance, but maintain enough flexibility so as to eventually align with emerging national and international rules. Analyses such as this provide useful insights recommendations for capacity-building, cooperation, and next-steps leading to “scaled-up” state-level implementation, but longer term, will need to eventually demonstrate accordance with the emerging national REDD+ vision and international standards.

### 2.2 Areas and Methods

Three municipalities: Villaflores, Motozintla, and the protected areas of Naha and Metzabok are chosen because they demonstrate mostly successful but strategically quite different programs, in biologically distinct areas.

- In Naha and Metzabok, CONANP and the NGO AMBIO, in part with a grant funded by the European Commission, are working with *ejidos* between reserves. Work includes reforestation that meets a rigorous voluntary carbon standard (PlanVivo) and actively promoting shade grown coffee and improving the communities’ coffee cooperative by working with a French fair trade organic certifier and distributor, Sposel. In this jungle region, shade grown coffee is the best hope for maintaining forest cover.
- In La Sepultura, Villaflores, CONANP and the NGOs Conservation International and ProNatura-Sur are working with *ejidos* within the reserve, including a larger scale coffee collaboration with MasCafe and Starbucks.
- In the Motozintla region, federal forest agency CONAFOR and state sustainable forestry commission COFOSECH have successfully worked directly with landowners in a variety of government supported programs, including reforestation and payment for environmental services (PES) (Programa de Servicios Ambientales del Bosque, PSA).

3 Available at http://www.cambioclimaticochiapas.org/portal/
Initiatives of these institutions in each region were documented, extrapolating lessons, challenges, and implications for policy and REDD+. To understand the groundwork of REDD+, interviews were first conducted with the key NGOs and government agencies in Tuxtla Gutierrez and San Cristobal. This allowed CCAP to learn the general array of NGO and government programs that affect land-use decisions at the local level. Detailed site visits and interviews were then conducted in these key forest areas, including several ejidos, local enterprises, local civil society organizations (or the local projects of statewide organizations), regional offices of government agencies, and community technicians. CCAP dispatched a principal investigator to Chiapas between April and June 2010. CCAP coordinated our site visits and interviews with Conservation International, AMBIO, SEMAHN, CONANP and ProNatura-Sur.

We interviewed members of Una REDD+ Para Chiapas to learn about their programs and the communities where they work, and visited La Sepultura and the Naha area of Lacandona. We did not approach ejidos directly to discuss REDD+ as a scheme, but did visit some communities alongside project or park representatives to learn about community management of forests and visit coffee, palm, and Plan Vivo. This interview process was applied for the areas of Villaflores and Naha which form “detailed case studies.”

In contrast, the study area of Motozintla is highlighted as a “scoping study,” and is suggested as an area for further analysis. The basis for this exploratory section of the paper lies on two interviews with COFOSECH and CONAFOR in Tuxtla (and regional interviews were not able to be conducted during site visits due to a serious illness of the principal investigator upon arrival in Motozintla).

3 CASE STUDY 1: NAHA AND METZBOK REGION OF LACANDONA RAINFOREST

3.1 Environmental and Social Context
The Lacandona—the lush, tropical rainforest for which Chiapas is famous— includes the federal protected areas of Naha and Metzabok, larger parks such as Montes Azules, significant coffee growing population, and historically important secessionist groups of Zapatista communities. Deforestation threatens all reserves and especially the space between the reserves. Naha and Metzabok were chosen as the case of the sites to investigate “readiness” efforts, because of significant community and government involvement in tree planting and shade grown coffee initiatives.

The Community of Naha resides in Naha and is mostly comprised of traditional Lacandone peoples. The village clusters around a central road that also forms an airstrip. Economically, the community runs a small ecotourism lodge, as well as participating in AMBIO’s projects of reforestation and shade grown coffee. According to CONANP, land tenure is not disputed in these areas, despite residing in a national park. Only one land-titled community resides in each reserve.

These communities within and surrounding the reserves generally exhibit a strong conservationist mentality—they favor organic farming, and keeping trees instead of cattle ranching if possible. Most have raised shade-grown coffee for decades. However, when the price of coffee fell dramatically in the 1990’s, many landowners were forced to raise cattle instead, leading to a sharp increase in deforestation of the region (documented by satellite images). This was combined with a loss of confidence in the “Coyote”—coffee middlemen who purchase coffee of any quality (often of poor quality) and return the smallest possible payment to the coffee growers. Many landowners who previously grew coffee abandoned their “cafetales,” after seeing little, if any, profit after investing a lot of time maintaining coffee fields. Yet, cafetales still remain. The organic and certified coffee projects in the region, run by CONANP and AMBIO and described below, have shown landowners that by organizing themselves into coffee cooperative, they can join together and receive a better price for their product.

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3.2 Programs and Projects

3.2.1 CONANP

The staff of CONANP in Palenque chooses its strategy for preserving Naha and Metzabok, and promoting forest cover in the region generally. In order to reduce pressure on the reserve CONANP works with communities both in and outside of the reserves, mostly in shade grown coffee and related enterprises. As a senior official explained: “We work in communities outside the reserve because that’s where the pressure on the reserves comes from,” though it is not the typical model of protected area staff to work outside of the reserves. Luckily, reserve directors have the freedom to determine where and how to apply their resources in order to best protect the reserve outside pressure. The office has developed a long-term strategy for the region to create biological corridors through shade grown coffee. Looking at satellite images of the region, it is clear that shade-covered cafetales comprise the majority of the remaining forest in this area of the Lacandona. CONANP staff maintain that keeping these cafetales operational, and bringing new, vulnerable parcels of land into coffee production is essential to maintaining forest cover in the region—and most importantly, perhaps the only viable strategy.

A good portion of the funding for implementation of cafetal promotion and community engagement strategy comes from a large 5-year grant from the European Commission to the Palenque office of CONANP. To staff the project CONANP employs one coffee specialist “técnico”. In addition, the full-time park staff of CONANP spend the majority of their week, often Tuesday through Friday, in the field working with landowners and communities on these and related projects. CONANP/AMBIO also contracts two in-community técnicos within Naha.

Nearing the end of the grant's lifetime, the cafetal project and overall strategy has exhibited considerable success. CONANP has helped the ejidos organize themselves into a coffee cooperative that exports beans to an international fair trade and organic certifier named Sposel. The community of Zaragoza, for example, contains a collecting, processing, and bagging facility for the beans, and there is a storehouse nearby the road to the village. The coffee cooperative has a Board of Directors that meets almost nightly to discuss quality control, marketing, landowner participation, and finding new buyers. Community members have learned to work in Spanish, their second language, as prospective coffee buyers do not speak indigenous languages of the Lacandona area. It is a highly organized, self-run association: “we are constantly seeking ways to improve, ways to better organize ourselves” one said.

The standards of land maintenance for certified coffee are much higher, which forces landowners to pay more attention to maintaining and cleaning their cafetales than they were accustomed. Parcelas are monitored by the organization of coffee growers every three months, as each season has a different focus for crop maintenance and ensures the quality of the product (for example, soil improvement, pest avoidance, measures against plagues). CONANP-employed técnicos maintain their vigilance to keep the quality of the coffee at a high level, which includes selecting the best berries at a certain times, and cleaning the fields between harvests. Yearly inspectors from Sposel verify the standards are being met.5

3.2.1.1 Engagement of women

Engagement of women comprised a specific aim of the European Commission grant to CONANP-Palenque; many spouses of cafetaleros became interested in going into business themselves. Women now run enterprises that operate in three different ejidos: a bread making operation in Santa Rosa, a mushroom growing operation, and a coffee toasting operation in Zaragoza. In the bread making business rolls are distributed locally to several shops in surrounding ejidos, where each roll sells for one peso. The Zaragoza toasting cooperative sells locally to similar shops.

5 The project was even written up in a French newspaper, for which a French journalist arrived to inspect whether the claims of forest protection and organic coffee were really true.
3.2.2 AMBIO/PlanVivo Reforestation

In this region, the NGO AMBIO and CONANP form an impressive partnership. AMBIO has integrated its activities in accordance with the land-use plan of the reserve areas, and added to and benefitted from the CONANP regional teams. AMBIO oversees the financing and verification for the tree planting, and is the project coordinator for the Plan Vivo sites.

Each with a specific methodology to implement and monitor progress and measure carbon, four categories of PlanVivo projects exist:

- Living fences
- Improved fallow
- Shade grown coffee
- Reforestation

To begin each project, AMBIO holds workshops to help landowners map their territory and plan where to plant specific crops. Usually in each family’s parcel, a landowner would choose spot for milpa and some cattle for sustenance, and then reserve the remaining areas for shade grown coffee, improved fallow or reforestation. The PlanVivo methodology requires a landowner to meet a specified number of trees each year of a certain height. Two técnicos who are paid by CONANP, carefully count the trees in each of these projects. “You have to count well to ensure quality of the whole project” one said. To verify the accounting, a third-party arrives once a year, sampling 10 percent of the plots to count and compare with the count of the técnicos.

3.3 Opportunities

- Reforestation can exist alongside shade grown coffee, and traditional land-use of the Lacandones.
- Local culture has enhanced, not hurt, conservation and sustainable forest efforts. The opportunities of environmentally friendly micro-enterprises have energized communities previously stricken with illnesses from pesticides.
- Working as a CONANP or coffee tecnico is considered a desirable job, and these government officials work well alongside community members and landowners, who are often their colleagues and friends.
- Private enterprise and land-use training forms a means of connecting with self-declared independent communities who normally resent and avoid government involvement or government services. Although this region maintains a number of secessionist Zapatista communities, coffee producers from the Association have successfully approached them. Because coffee producers do not represent government authority, they are allowed to enter the community, and one Zapatista community has joined the coffee association.

3.4 Challenges and Barriers

- The European Commission grant, the major source of financing for the five-year plan to promote shade grown coffee as a primary strategy to protect the region’s rain forest, ends in mid-2011. Soon it will be more difficult to finance the active engagement of the communities in this project so the office is searching for other funding opportunities.
- The CONANP-Palenque office maintains a small guaranteed budget: funding for the Palenque office is allocated yearly from the central CONANP federal office and each year a good portion of financing must come from outside CONANP for them to continue or improve their operations. The Palenque office must seek outside funding from overseas grants or internal Mexican private grants.
- Aside from PlanVivo sites, carbon quantification has not occurred in other shade grown coffee areas.
In coffee cooperatives and the bread making business, there is no differentiation of payments between those who do the best job and those with less performance. Payment is divided equally among the group, which irritates some high-performers.

Funding constraints can also hinder follow-up on specific projects and communities after a start-up capital investment is made. For example, after a technician left the community the bread machine was been broken for about six months before it was fixed. Those efforts with dedicated staff tend to do better.

3.5 Implications for REDD+

In the Lacandona regions, it is quite clear that scaling-up activities for REDD+ should incorporate and build upon CONANP/AMBIOs existing efforts. The model of government programs cooperating with local NGOs and communities, and private (coffee) enterprises works efficiently and effectively. These efforts could serve as part of a potential REDD “scaling-up” program, where such partners could form a potential consortium utilizing federal funds for scaling up, and be considered as local partners of the national strategy. Given the conservationist mentality of landowners in the region, and the good price achieved by shade grown organic coffee, expanding these initiatives is a workable strategy to preserve the regions forest cover and should be a key part of REDD+ efforts in Lacandona.

Even so, regional protected areas offices would need to build more capacity to design a larger program and determine a precise amount of required funding. While CONANP staff are well versed in applying for, receiving, and managing external funding, they face a smaller-than-desired budget from the federal office, and thus have not calculated an ideal budget for the office and the ideal array of activities. A “vision” and “needs assessment” exercise would be useful, examining what the office could realistically achieve with more resources, as a blueprint to begin seeking the necessary funds.

4 CASE STUDY TWO: SIERRA MADRE SEPULTURA (NORTH)

4.1 Environmental and social context

In La Sepultura, most of the pressure in the reserve comes from ejidos within it. Similar to other areas, cattle production is a major driver of deforestation in the region. Landowners are expanding their cattle production because of general profitability. Even though the region is also still recovering from the 90’s dip in prices, coffee is the still a major economic export in the region as the local altitude and temperature are ideal for growing this crop.

The Sierra Madre also has a high vulnerability to climate change: over the next several decades, the climate is expected to become drier and less amenable to coffee. Adaptation efforts are needed over long-term to provide other livelihoods to these communities. In the short-term however, coffee is still strong and landowners are beginning to experiment with other types of products and land uses.

4.2 Programs and Projects

4.2.1 CONANP

Because the pressure on the reserves stems from land use by communities and ejidos within the reserve, CONANP focuses on engaging ejido members through: land-use planning, environmental education, technical training, working with local NGOs, and helping ejidos learn from each other. Like in Naha, CONANP works with all NGOs in the region, and says each actor fills a niche in an “organic process of complementary activities”. For example, CONANP can conduct and specialize in technical training while NGOs help associations access the market. The organizations fill-in needed functions, but also support the work of CONANP and regularly include CONANP in their activities, meetings, workshops, and community strategies.
4.2.2 Conservation International

For over a decade, Conservation International (CI) has devoted staff working almost full-time with these communities and promoting coffee in the region. They have worked with the landowners to form coffee cooperatives and work with the organization MasCafe as well. CI has been working with coffee growers in the region, and has secured the involvement of Starbucks including the CAFÉ standard which allows Starbucks to trace its coffee back to sustainably managed sources. Specialty auto shade grown coffee is found in Starbucks stores in the United States. Building on this success, pilot areas of the coffee growers associations are also involved in initial payment for ecosystem services for maintaining trees. CI is expanding to similar projects in other areas of the Sierra Madre, some in partnership with AMBIO for extended PlanVivo opportunities in other parts of this mountain range.

4.2.3 ProNatura

In La Sepultura, the organization ProNatura has a long-standing relationship with ejidos and helping them to grow and sell sustainable palm fronds, which coexists well with sustainably managed forests and shade grown coffee. Crucial to this effort was organizing into an association of palmeros (palm producers), which allowed them to access the market. A buyer from the United States, Continental Flowers, markets these as “eco-palms” for churches in the United States. Easter week is most profitable for these products, although there is a year-round income from the palms. The Association of Palm Growers has an impressive internal organization that monitors quality and organizes the bundling and distribution.

ProNatura facilitated the process of organizing into a palm producing association, along with the involvement of CONANP. The key role of ProNatura is to dar seguimiento a (give follow-up to): help organize a weekly meeting, create formal documents, devise methods for quality control, and collaboratively determine next steps in the process of selling the palms and improving the business. ProNatura is currently investigating the association through a micro-finance and business loans to help improve and expand the operations.

4.3 Opportunities

According to ProNatura, landowners in this region tend to be open to new opportunities and different ways of using their soil. A given landowner will maintain up to four of five different types of crops on their parcel: they intuitively guard against the risk of dependence on one crop. To them, diversity in land-use yields a more resilient subsistence and income. As one ejido member said in the meeting of Asociación de Palmeros, they must “take advantage of the market while the market is there…who knows what will happen in the future.” Members maintain that they have seen a difference in the income to their communities, which heightens their willingness to participate in new ventures.

- Ejidos in the region communicate with each other and learn from each other; therefore, new initiatives or successful opportunities spread by word-of-mouth. A REDD+ program in the region could rely on the existing social networks as well.
- Continued work in the coffee and palm industries rely on existing eco-friendly and forest family practices. As palms and coffee are already certified, much of the groundwork is already done for potential future certifications or verifications required for REDD+. The communities are already trained and accustomed to complying with certifications and will likely be more open to involvement with a rigorous REDD program.
- Sustainable land management REDD+ techniques could be disseminated by the agronomy campus of UNICACH is in nearby Villafloros. UNICACH is experienced in education and outreach activities with the local communities in this area.
4.4 **Challenges and barriers**

- Like CONANP in Palenque, funding is a challenge for the park agency. The park’s CONANP office, based in Tuxtla, has elaborated plans for expanding conservation projects in the region, but substantial funding will be required.
- The rate of adoption of new practices and opportunities cannot be assumed to be uniform between or among communities. Different *ejidos* have different levels of success with both coffee and palm activities. Some are more organized than others; many successful ones have younger community members who more enthusiastic about organizing.

4.5 **Implications for REDD+**

- The current success with coffee and palm implies that with the proper outreach and *seguiimiento* to communities, a REDD+ scheme could be introduced alongside the existing shade grown coffee and palm practices.
- The readiness, implementation, and scale-up strategy of REDD+ in this region should rely on this existing innovative and “organic” consortium of federal agencies, communities, NGOs and private sector cooperating in land management and community training. They would likely achieve even more with REDD+ funding.
- Successful methods of working with *ejidos* in remote areas of the reserve should be replicated, bringing new communities on board, and encouraging inter-community cooperation.
- The economic structures of both palm and coffee can be used for REDD+ activities as well, as is potentially mirroring their methods of transmitting funds to separate accounts for different *ejidos* (and/or further, landowners within specific *ejidos*).
- Within the REDD+ context, this could even serve as a pilot initiative for testing such fund distribution structures from government program (or market) to community.

4.6 **SCOPING STUDY: MOTOZINTLA (SOUTH SIERRA MADRE ALTA)**

4.6.1 **Environmental and social context**

The high Sierra Madre near Guatemala contains very vulnerable landscapes characterized by steep slopes. Its vast forests are affected almost daily by rain and erosion, and Hurricane Stan devastated the region in 2005. Tree-cutting and clearing occurs on steep slopes in the area—even in the peaks of mountains surrounding Motozintla—a practice which usually damages the water supply, puts pressure on existing forests, and makes the area even more vulnerable to damages from extreme weather. Yet, the area has reputation of working well with government funds and programs to slow the deforestation process.

4.7 **Programs and Projects**

4.2.1. **Government Agencies: CONAFOR (federal) and Instituto de Inversion Productiva y Bio-Energeticos (IIPBE)(state)**

CONAFOR and IIPBE are very active in this region. *Motozintla* and the surrounding areas have, according to interview sources, at least seven types of CONFOR and state-level government support programs. These include reforestation, payment for ecosystem services, soil protection, and others. CONAFOR and IIPBE often work together in the region, combining expertise and management. COFIAR works with a number of communities in Chiapas on Mexico's reforestation program which also manages the program to control forest fires.  

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6 Chiapas has undergone efforts to reduce deforestation and recover 1 million hectares lost from 1972-2007.
These natural resource agencies are experts in actively engaging local stakeholders. These departments house monitoring and land management/forestry specialists who also work directly with communities. Capacity building by these agencies occurs at multiple levels:

- **CONAFOR / COFIIAR** will train local officers on programs and implementation; then those officers then conduct training courses for landowners and local technicians.
- When resources are assigned for the ProArbol or fire prevention program, they also assign a technical assistance expert to work with landowner. The state maintains a roster of over 100 *tecnicos* (technical specialists) who work one-on-one with landowners.
- The central office later verifies the work done by the *tecnicos*, and if a *tecnico* has reported incorrectly s/he is no longer allowed to work with the program. *Tecnicos* work with specific landowners on reforestation and help create a technical assistance plan to which the agency and landowner must agree.
- Natural resource agencies acknowledge that sometimes they are not as trusted by local communities as NGOs since they represent the government, but they have also seen consistent progress by working one-on-one with communities.

IIPBE supports the small producer ex-ante with reforestation materials such as trees and training and with financial resources ex-post. For reforestation activities, farmers are paid after planting, but they do not always have access to financial credit up-front to initiate planting, improving soils, or increasing productivity.

- **IIPBE** also conducts courses (*practicas*) on sustainable forestry and preventing forest fires. Creative strategies are utilized to educate communities about these issues and the support programs available. Representatives from the state commission conduct workshops with the communities and recruit participants. In exchange, participants receive in-kind gifts such as food baskets.

### 4.2.2. United Nations Development Program

UNDP runs a risk management and disaster relief program in the area, and other programs focusing on capacity-building and training stakeholders. Its effective risk-management decision-making table could form an interesting model for REDD+ (see UNDP under “Actors” section, 7.2).

### 4.8 Opportunities

One key reason why this area has a history of working well with CONAFOR and IIPBE is that the communities are accustomed to participating in governmental environmental programs. According to IIPBE, many communities have reliable members who participate in government land-use initiatives and become community “change agents”. According to IIPBE up to 10% of the community members are reliable members. This model has, and can be further, echoed in other communities.

- These communities would likely be open to new types of outreach and other types of governmental initiatives which makes them an attractive starting area for REDD+.
- The training courses that are part of the current forestry programs have had an unanticipated benefit: they create lasting links between the commission and the participating communities. The program director has found that once a member of the community participated in a workshop, he was then more likely to participate in subsequent workshops or surveys, becoming therefore a liaison between the government and the community.
- IIPBE is in talks with the federal and state governments to provide more funds to farmers to allow them access credit upfront. They would envision a split of seed funding: 50% financed by the state of Chiapas and 50% financed by the federal government. Access to better up-front finance and credit would expand the number of landowners who could participate and the amount of improved forest management initiatives.
4.9 Challenges and barriers

• Although the region works well with government programs, in contrast, it has been historically difficult for NGOs to take root, engage with communities, and achieve results. In fact, several NGOs have left the area due to the difficulty of working there. It may be more difficult for NGOs to fill a needed role in forest management in this region.

• As an isolated region, Motozintla ranks highly on the government’s marginalization index, because at times resulted in late deliveries of seedlings, delayed paintings and in-kind payments.

4.10 Implications for REDD+

The IIPBE/CONAFOR initiatives demonstrate several lessons.

• The community liaisons (up to 10% of the community) can form a piece of the emerging REDD+ institutional and social framework to ensure local implementation and follow-up.

• In this area, the government has resources and institutional capacity at hand to help train local communities, as demonstrated by the “System to Control Forest Fires” program.

• NGOs are much less likely to be part of the solution for REDD+ here; therefore the types of “organic” collaboration and cooperation viewed in Sepultura and Lacandona may not succeed here.

• Extra efforts should be made in marginalized regions like this to ensure that supplies, trainings, and even news of REDD+ arrive within a reasonable amount of time.

• Granting landowners access to upfront credit, not just seeds for planting, could form a core component of an expansion strategy and part of a policy solution.

• In areas with many state and federal forest programs operating, there is greater need to closely examine incentives stemming from these government programs, and streamline them for maximum efficiency.

5 IMPLICATIONS FOR REDD+ POLICY DEVELOPMENT IN CHIAPAS AND MEXICO

Chiapas has many institutions, programs, and organizations (NGOs) in the current priority areas, and is ready to begin undertaking planning for REDD+ readiness and scaled-up implementation. Building upon success in existing priority areas – whether through NGO work, government work, or collaboration – is a key first step. This includes building upon Conservation International's work in the Sierra Madre and AMBIO’s work in the Lacandona, further elaborating innovative partnerships with CONANP, and expanding federal programs in the high Sierra. With guidance by CONAFOR and SEMARNAT state-level expansion would likewise need to feed into the emerging national vision and strategy for REDD+.

In considering scaling up to REDD+, this analysis shows that it is important to take note of several types of existing efforts:

• State and federal agency initiatives
• NGO initiatives to build upon
• Stakeholder/NGO cooperation
• Community/ejido engagement strategies

NGOs, federal agencies, and state agencies such as the Protected Areas Service and the Forestry Commission will need to identify the strategies likely to be replicable in new sites, as well as choosing sites for expansion. This may be as simple as expanding to a neighboring district in the Sierra Madre, for example, or targeting a valley connecting forest areas in the Lacandona. It may also be important to form a method to evaluate likelihood of success in new potential areas or evaluating priority ecosystems or communities.
5.1 **Cooperation and Roles of NGOs and Government**

REDD+ implementation will require cooperation and coordination between the state and federal government programs, and NGO-based activities in the specified regions. At a national level, CONAFOR is poised to explore the link between national policymaking and state policies and programs through analysis and recommendations by CTC-REDD+ group, stakeholder intuitions and additional CCAP research.

### 5.1.1 Coordination between federal and state levels government

Regional experts on forestry maintain that state and national resource programs still need capacity building and strengthening, as well as better coordination with federal programs. Areas like Motozintla demonstrate that it is possible for state and federal programs to work together. However, most state programs will need to increase their capacity and budgets to implement REDD+. For example, while the federal CONANP has staff in a highly organized system while the state protected areas team is largely understaffed. With a larger or re-allocated budget, Chiapas could enhance the resources and staff available to the state protected areas team. Likewise, federal agencies could devote more resources to regional branches like CONANP.

### 5.1.2 REDD+ steering committee

Within Chiapas, a REDD+ steering committee *Una REDD+ Para Chiapas* will lead the development and implementation efforts at a state level. The steering committee is comprised of both representatives of government agencies (i.e. SEMAVIHN, IIPBE, Secretaria de Campo, CONAMP, and others) and programs within the state. To improve its functioning, it could consider to:

- Include a broader spectrum of state REDD+ actors including the NGO’s and academic institutions who are currently members of the stakeholder group, *Una REDD+ Para Chiapas*, as well as representatives from and nominated by *ejido* organizations, women’s groups and indigenous peoples.
- Along with the government of Chiapas, *Una REDD+ Para Chiapas* should begin to delineate responsibilities and communication channels in the given regions. It is recommended that the committee divide into work groups or task forces to address issues such as MRV, stakeholder engagement, transparency, and a host of other issues, as was agreed to in early May.
- For wider REDD+ implementation, the committee should work to identify current successful initiatives and additional resources needed to take these initiatives to the “next level”, and what barriers if any exist to making them more effective. This should include geographic areas and strategies for community engagement.

### 5.1.3 Municipalities

Municipalities present both challenges and opportunities with regards to REDD+. Most municipalities receive and keep land title registries, a clear link to land-use policies. However, rounds of interviews showed that interviewees did not consider municipalities as good hubs for REDD+ implementation. Rather, they are viewed by locals in Chiapas as administrative bodies in danger of corruption. As administrative hubs, municipalities lack technical expertise on the very specialized elements unique to REDD+. The sheer distance to the municipal center in some areas has proven to be a burden on land titling updates, as many communitarians rarely - if ever - visit far-away municipal centers. Because municipalities change officers and governance every three years, the final year is often unproductive. Such complications could present a difficulty if municipalities are to be involved in REDD+, although this clearly depends on the district.

However, there may be a role for municipalities, and this should be carefully explored. The following examples show how municipalities can play a role in REDD+:

- CONAFOR works with Jira, an organization in Jalisco that tackles this 3-year period obstacle through inter-municipal associations.
• The World Bank will be funding a municipal–level climate change program (which includes forestry and REDD+) in the municipality of Othon Blanco in the State of Quintana Roo.

• In areas where municipal centers already exist and are utilized for, for example fire prevention, the centers could be expanded and staffed with regular full-time employees and not elected employees. In areas where municipal centers or community resource centers are not operational, it may be a waste to spend resources to create them. In any case, large capacity building efforts regarding governance (including corruption eradication systems) must be put in place. Lessons from existing projects from the World Bank and CONAFOR can be tailored to specific circumstances after government representatives determine which specific municipalities are suitable for REDD+ readiness responsibilities.

5.2 Scaling-up Financing

5.2.1 Financing and potential government contracts
REDD+ schemes will likely result in increased finance to the state government, and potentially more funding to NGOs. A transparent and accountable process to access and distribute these funds needs to be created. It is most likely that the government would have the option to use NGOs as collaborators and implementers. A potential structure could mirror international development agencies, which contract out services to organizations or development specialists. Suggestions on NGO integration include:

• Both state and local NGOs need greater funding and capacity to implement REDD+. Most NGOs view themselves as the key implementers of REDD+ projects, but acknowledge that they would need more funding, staff, and capacity building for the new staff. To achieve this, NGOs should prepare for several options, including partnerships, to gain access to funding, which may be distributed through the federal government or through outside funders.

• If applying for funding or as a project partner, NGOs could be granted funding by providing a justification, for example, that they provide a service to the government, or occupy a role that the government cannot, or will use models of cooperation such as the CONAMP/AMBIO or filling-in niches in La Sepultura.

5.2.2 Finding means of upfront credit
As the IIPBE/CONAFOR programs demonstrate, accessing upfront credit or funding to invest in new types of forestry management is crucial for landowners. Likewise, for growing palm or coffee, landowners must feel the long-term payoff is worth the initial near-term investment and opportunity costs. Because upfront funding makes such as near-term investment more likely it will likely play an important role in national REDD+ schemes. Because the government is a logical source of such upfront financing any national REDD+ plan will need to consider such financing issues, as well as others that local and state-level officials and landowners face. As in the case of Chiapas, providing upfront finance and aligning national and state long-term incentives will form a crucial piece of any REDD+ strategy.

5.2.3 Transparency of funds at local levels
Several communities have models of receiving funds that could be replicated for REDD+. For example, the Association of Palm Growers has different bank accounts for each ejido, and funds from Continental Flowers are deposited directly. This provides a traceable model of account management.

5.2.4 Registries
Registries will be useful for comprehensive evaluation of REDD+ activities. NGO-led initiatives and projects could be catalogued in a state database or project registry so that both the state and national government can keep track of activities even outside their purview.
5.2.5 Needs Assessments
Internal needs assessments are necessary: regional offices of protected areas (either federal or state) are accustomed to operating under budget, but instead should analyze an ideal budget for REDD+ implementation. An internal exercise of how much funding would allow them to achieve their aims would be helpful to incorporate into state strategies for REDD+.

5.3 Working with Ejidos and Communities
Working within a community/ejido is fundamental; a base of cooperation and trust (between landowners and NGO/Government community liaison tecnico) is essential. Whether through coffee growing, organizing upon cooperative, or measuring trees year to year, REDD+ will be a long-term endeavor. Interviews and site visits demonstrated that working with ejidos and local landowners is crucial to the success of any forest maintenance program. Most NGOs directly with the communities and landowners, and their community liaisons employ various strategies in engaging landowners in planning and participatory processes.

These include:

- Mapping exercises, where a NGO or agency conducts a multi-day workshop and a community to map existing territories, and help each landowner determine where specifically to put certain crops in their parcel. This exercise often results in landowner deciding to set aside a portion of land for shade grown coffee, carbon capture, etc., which could be expanded to other REDD+ activities.
- Workshops on any number of topics, such as climate change, forest management, measuring, etc.
- Awareness building exercises, such as those conducted by CONANP, where communities ponder the personal and cultural meaning of the environment.
- Small business interviews, where an outsider will help document practices to improve their business for palm, coffee, ecotourism, etc.
- Organizing community meetings and step-by-step follow-up (dar seguimiento).
- Most programs use the existing governance structure of these communities (The Assembly, President, etc.) and formally present a project idea at an assembly for acceptance. This provides community input and buy-in to programs.
- Many NGOs also caution about managing raising expectations of local communities about potential new revenue streams. Rural communities are small enough that the appearance of the foreigner or outside actor can start rumors, and raise expectations of money arriving shortly. CCAP has found similar worries among many forest negotiators from various countries at the international level. As in the field research for this paper, foreign visitors should be accompanied by staff from local institutions.
- Any REDD+ program should dar seguimiento (give follow-up) to the communities and landowners where it operates, either through their own program staff or contracted NGOs. For example, seguimiento ( follow-up) is currently being demonstrated by several CONAFOR programs (PSA is the best case), which each have some sort of seguimiento approach that could be amplified for REDD+.
- When contemplating REDD+ it is important to build communities’ abilities to organize themselves. Communities themselves can organize and improve operational structures for land use in business, as has been showed by the many cooperatives already in place.

5.3.2 Land Titling
In these case studies land titles were not a barrier nor an added requirement for “readiness” because most land was already titled or held in communal-property ejidos with rules governed by those ejidos. This is one way in which Mexico is unique when compared to other tropical forest countries. However, when creating a REDD+ program the Mexican government should keep in mind that land titles are an important aspect of engaging communities and following UNFCCC guidelines on REDD+, and make sure that records are complete.
5.3.1 **Government-NGO collaboration**

This research sheds light into the role and importance of NGOs collaborating with the government to implement REDD+. These government-NGO relationships demonstrate the need for local stakeholder assistance with implementation and scaling-up. The work of AMBIO and CONANP is a very useful case, and likely well known to SEMARNAT and CONAFOR. Analysis of such examples shows:

- It would be useful to evaluate is whether it is possible for the government agencies, such as CONAFOR or SEMARNAT, to “hire” NGOs for specific REDD+ tasks -- perhaps those communities that are less amenable to existing or emerging government programs, or in areas where NGOs currently work.
- Government forestry programs could evaluate their experiences working with NGOs. According to sources in CONAFOR, the PSA program had successful stories of NGOs working alongside with the government. Further analysis could be done within CONAFOR, to test the hypothesis that NGO collaboration was a key factor within the array of successful PSA stories, and then draw the lesson to REDD+.
- CONAFOR’s past successes could be examined and applied to REDD+. Ambio has also worked with CONAFOR (receiving money on afforestation and reforestation projects). Another well-known case case from the CONAFOR PSA program is SAO (an NGO in Oaxaca) that helped *ejidos* organize themselves, apply for, and receive funding to develop afforestation and reforestation carbon sequestration projects. They are currently selling their carbon credits through a carbon broker (ProNatura DF) to Televisa (a main mass media enterprise).

5.3.2 **Outreach from federal programs on social capital**

At a federal level, outreach and *seguimiento*, as well as ways to keep fostering knowledge and information exchanges between communities, would be necessary for REDD+ implementation. For example, a key interest of CONAFOR is to promote community forestry management. A program called PROCYMAF promotes the strengthening of social capital within forest communities to foster better decision-making about the forest. PROCYMAF has several activities to build community social capital, such as “exchanges between communities,” where CONAFOR-PROCYMAF sponsors a community member to go to another community to promote capacity building of a given theme. These kinds of outreach strategies could form a pillar for REDD+ in Mexico.

5.3.3 **Engaging women**

As these case studies show, women-run enterprises (i.e. toasting coffee beans, bread-making, growing mushroom or other agricultural products) can be a logical offshoot of traditionally male-run coffee and palm growing businesses. In such rural communities, this can be a way of building sustainable income while allowing women to stay near their homes and children during the day.

5.3.4 **Employ diverse types of strategies even in the same target area**

Chiapan forest-dwelling landowners tend to be risk averse, which (counterintuitive for some) means diversifying their outputs. Therefore, the REDD+ options for landowners must reflect this preference for diversity. This could be employed by:

- The state providing a “menu” of options for different regions, and landowners could participate in some also maintaining *milpa*, where sustainable amount of cattle.
- Participating in multiple use REDD+ strategies. Chiapas could take advantage of the “plus” aspects of REDD+ by incorporating reforestation in existing forest areas or in coffee or palm plantations.

5.4 **MRV: activities, reductions, and financing that are measurable, reportable, and verifiable**

Each of the case studies demonstrates several layers of both monitoring and verification:
• In the cases of the Sierra Madre, Sposel, and PlanVivo community or local technicians complete an initial round of monitoring, after which a certain percentage (usually 10%) are monitored by outside verifiers. REDD+ specific monitoring and verification could be added (this is currently under investigation by the Una REDD+ Para Chiapas group).
• Similar approaches could be used at a larger scale for Chiapas’ REDD+, leaving enough flexibility to adapt to international standards that will likely emerge over the next few years from UNFCCC and bilateral agreements.
• An emerging partnership between Norway and Mexico will further examine MRV, providing lessons.

5.5 Technical cooperation
In preparation for REDD+, Chiapas (the government or its NGOs) should begin seeking funds for precise carbon quantification, such as those ECOSUR, COLPOS, and ProNatura are proposing for their projects. Any carbon quantification methods would need to be carefully vetted by the national government to ensure compatibility with a national REDD+ program. These case studies also show:
• Carbon quantification in key areas, such as tree-planting or certified coffee areas, could be added-on to existing schedules of parcel maintenance activities.
• Once carbon quantification of projects and programs begin, there will be a challenge of determining which program or initiative generated the reductions, and rewarding them appropriately. This will be especially important for cases where the work is being done collaboratively (such as between AMBIO and CONANP). Federal and state level governments should coordinate on this issue, develop solutions, and make the application of these solutions consistent, thereby averting this problem before it arises.
• In several community-based initiatives, such as the bread making or coffee business, participants acknowledge that rewards do not differ between those who perform well and those who perform simply adequately. With REDD+ perverse incentives are even more probable and rewards would likely need to be linked to the estimates of carbon saved or sequestered based on accurate quantification.

At a larger level, transparent and efficient data flow between state government and agencies such as INEGI, CONABIO, and CONAFOR is essential. State natural resource monitors need quick and consistent methods of getting up-to-date information and input into their system.

6 CONCLUSION
The great challenge of REDD+ is that it must span from the very local -- individual landowners making decisions about their parcels -- to the national level. In this same vein, the national government must create an enabling policy and infrastructure environment that would accommodate for the realities of states and promote good state-level performance. Mexico has committed to a national program and any expanded efforts in Chiapas must function within that context. Institutional analyses such as this one can inform the development of REDD+ strategies by researching key issues like financial transparency, community monitoring, carbon quantification, verification, and others that emerge in both national and state planning.

The following are proposed as a follow-up to this analysis to further complement the aims of the national government and provide useful inputs for the state of Chiapas:
• Lessons from Chiapas could be linked specifically to the National REDD+ Vision.
• MRV: Explore the possibility of scaling up the PlanVivo methodology, while corresponding to emerging national requirements for MRV.
• Analyze if sustainable agroforestry could be a prioritized activity as part of Mexican support for the “plus” aspects of REDD+ and determine in which ministries this would fall.
• Examine if the community involvement procedures piloted by ProNatura, AMBIO, and CI could match the international and national language on “involvement and participation of local people.”
• Determine how such programs and lessons could be placed in a central registry and be accessible to federal REDD+ policy makers and funders.
• Add new areas and institutions to analysis by the state, which could eventually form an institutional map of Chiapas. These can be utilized as a tool for other states or the national government. In the process, combine the expertise of Una REDD+ Para Chiapas, SEMAVIHN, CONAFOR, and CONAMP to form a map of REDD+-related initiatives in Chiapas.
• The state government should take advantage of NGOs, volunteers, or contractors to research initiatives and opportunities for cooperation in others areas of the state in order to facilitate the scaling up process.
• Likewise, the federal government could replicate analyses of high-priority areas in order to help find the sub-national/national leakage.
• CONAFOR and IIPBE could examine internally what makes their programs in the high Sierra successful, and share these lessons with SEMVIHN, and Una REDD+ Para Chiapas.
• Institutions involved in these case studies that examine their ideal budgets and plans for expansion. Needs-assessments could be conducted for SEMAVIHN, CONANP regional offices, and REDD+ Grupo members. Then, these actors could compare assessments, giving both the state of Chiapas and the federal government details on the financial needs of local implementers.

The national Mexican REDD+ program is under development, with an eager and knowledgeable central government that has been closely involved with the success of REDD+ in the international climate negotiations. The difficulty of REDD+ for any such willing country is that comprehensive national REDD+ programs worldwide have not been developed and implemented; therefore, best practices, structures, funding, and useful examples are being sought by a wide variety of countries, researchers, and policymakers.

In such a context, making use of case-studies and maintaining close and effective communication between local and national policymakers is vital. Case-studies such as this in the state of Chiapas can provide very specific and useful lessons on coordinating efforts and scaling-up quickly, and serve as inputs for national and even international purposes. Meanwhile, local implementers and NGOs in Chiapas should make an active effort to learn more about and follow the concepts, policies, ideas, and terminologies being used to discuss REDD+ at national and international levels. The most immediately relevant emerging structure being, of course, the national REDD+ strategy that is under development with completion aimed at 2012. By doing this, state government agencies and organizations can begin expanding REDD+ at a local or state level, while maintaining enough flexibility to meet emerging national and international standards, methods and structures.
### 7.1 Matrix of Institutions

#### Table: Matrix of REDD-RELATED Case Study Institutions

<table>
<thead>
<tr>
<th>Government Agencies</th>
<th>Non-Governmental Orgs</th>
<th>Universities</th>
<th>Cooperatives</th>
<th>Private Sector</th>
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</thead>
<tbody>
<tr>
<td><strong>Ejidal/Community</strong></td>
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<td><strong>Local/Municipal</strong></td>
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<tr>
<td><strong>State</strong></td>
<td>IIPBE, SEMAVIHN</td>
<td>AMBIO, ProNatura-Sur, ECOSUR</td>
<td>MASCAFE, Una REDD</td>
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<td>UNICACH, Para Chiapas</td>
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<td><strong>Federal</strong></td>
<td>CONANP, CONAFOR CI</td>
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<td>SEMARNAT, INEGI</td>
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<td><strong>International</strong></td>
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<td>Sposel</td>
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<td>UNDP-Chiapas</td>
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<td><strong>Long-term REDD</strong></td>
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<tr>
<td><strong>Related</strong></td>
<td>Secretaria del Campo</td>
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<td>SAGARPA</td>
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</table>
7.2 OVERVIEW OF CHIAPAS REDD + ACTORS AND PROGRAMS

List of acronyms
AMBIO: The NGO conducting PlanVivo forest carbon projects in Chiapas
CCAP: Center for Clean Air Policy
CI: Conservation International
IIPBE: Instituto de Inversion Productiva y Bio-Energeticos
CONAFOR: National Forest Commission
CONABIO: Commission on Biodiversity
CONANP: National Parks Commission
ECOSUR: El College de la Frontera Sur (University)
GEF: Global Environment Facility
GHG: Greenhouse Gas
INEGI: National Institute of Statistics
IPCC: Intergovernmental Panel on Climate Change
MRV: Measuring, reporting and verification
NGO: Non-governmental Organization
PES/PSA: Payment for Environmental Services/Programa de Servicios Ambientales
ProNatura DF: Mexico-City based carbon broker
PROCEDÉ, a federal program to demarcate lands
PROCYMÁF: Community forest management program
SAGARPA: Federal Agricultural and Rural Development Ministry
SAO: Oaxaca-based NGO with forestry experience
SEMARNAT: Ministry (Federal) of Environment and Natural Resources
SEMÁVIHN: Secretary of Environment, Housing, and Natural History, Chiapas State
UDEPOM: Unión de Ejidos and Professor Otilio Montaño
UNEP: United Nations Environment Program
UNFCCC: United Nations Framework Convention on Climate Change
UNICACH: University of Arts and Sciences, Chiapas
UNDP/PNUD: United Nations Development Program
USAID: United States Agency for International Development

7.2.1 CONANP
The federal natural areas commission monitors up to 22 parks, with a chief technician and local staff at each. They have divided the state of Chiapas into six regions, and designated a regional head for each. Each regional head is responsible for the overall strategy that region and the parks within that region (Lacandona, Zona Norte, Costa, Sierra Madre, etc). Each park within that region has a park chief, a management plan and a team of technicians. Facilities include regional offices and encampments in the actual parks.

7.2.2 State Areas Protegidas
In contrast to CONANP, the state protected area has eight full-time central employees for all protected areas run by the state of Chiapas, along with several regional staff. Procede, a federal program to demarcate lands, has helped greatly. The central team of state protected areas staff maintains site lists of vulnerable areas based on marginalization index, distance from roads, services such as schools and medical centers. They have divided the state up into different zones according to hydrology and biodiversity. Those that appear most vulnerable in key zones are often prioritized. Analysts use geographic information systems to analyze and map priority areas, and robust management plans for the state. Most analysts use the ArcView program, which is deemed superior to the IRIS software published by the statistical agency INEGI.
7.2.3 **UNDP**

UNDP/PNUD conducts an impressive program of risk assessment and reducing vulnerability in poor and rural communities in Chiapas. In the two years since the program began, the UNDP has been able to follow a methodology to ensure participatory processes and free prior informed consent. They implemented a “Discussion Table” model that brings together stakeholders to assess risk and incorporate climate change into land management decisions to mediate that risk. UNDP is in the process of establishing a list of communities/stakeholders they collaborate with.

7.2.4 **Mesoamerican Biological Corridor**

Drafted and funded in part by the assistance of the GEF, UNDP, UNEP and the World Bank, the Mesoamerican Biological Corridor aims to create a biological corridor where across countries in Central America. The Chiapas portion is funded and coordinated by USAID, with a number of other primary donors. 

7.2.5 **Conservation International Mexico**

Based in Tuxtla-Gutierrez, CI-Mexico is involved with a broad statewide level on REDD+ and climate change, as well as on the local level for forest carbon and coffee projects. At a state level, CI is supporting development of sound scientific baselines, facilitating processes for stakeholder engagement in REDD+ policy development, providing expert input to government decision-makers, coordinating with outside institutions such as the British Embassy and CCAP. CI has collaborated in climate modeling show the Sierra Madre will become drier and hotter, threatening of the key crops in the region such as coffee.

At the local level CI is also supporting shade grown coffee, collection of palm fronds, and payment for ecosystem services in the Sierra Madre; they also possess expertise in ecotourism, climate adaptation, and ecological services. Recently they began supporting shade grown coffee and other areas of the state, near El Tacana and Pico de Loro. CI’s Verde Ventures will open a line of credit with the coffee cooperative Unión de Ejidos and Profesor Otilio Montaño (UDEPOM), who will in turn run training courses for ejido's, as well as introduce sustainable farming techniques to conserve soil and native fruit trees in areas hit by hurricane Stan. CI will be partnering with AMBIO to expand throughout the Sierra Madre region. Having worked for over 10 years in the Sierra Madre, CI is a key partner for the government in scaling up of REDD+.

7.2.6 **AMBIO**

AMBIO, a San Cristobal-based NGO focuses on land-management and forestry, began its work in 1998 designing community projects to enhance forest cover and improve indigenous forest management. This became the PlanVivo project in Chiapas, a system of community forest management schemes focused on agro-forestry. Ranging from ¼ to 8 ha, these are small projects with an average plot size of 1 to 1.5 ha. Currently, AMBIO has 11 project areas total; now they have 50 enrolled participants in various communities/ Ejidos. They also have strategies for the regional level-- for example in the Frontera Corozal-- in which 10 communities are enrolled around Naha and Metzabok. AMBIO projects have demonstrably been able to provide extra income to people in those communities.

In just over 10 years, AMBIO has demonstrated scale-up and growth, cooperating with an international standard, PlanVivo. Each project area has a community technician that visits the parcels each year as part of a regional team. They initially conduct inventory and then continue to monitor parcels. AMBIO discovered the necessity to have a "land use baseline" in which to determine whether an individual landowner recruit participants are actually changing their land use. Overall, as an implementer and community liaison, AMBIO has learned the particularities of working in communities from the start of a project to scaling up within a region.

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These project start-up activities include:

- Translation services—many indigenous villages do not speak Spanish
- Identifying ideal types of agro forestry systems and management systems
- Quantifying and explaining the benefits of these systems to landowners
- Baseline information—“Baseline” in this context refers to typical land-use and its projected trajectory. AMBIO must be able to assess whether a community/landowner/participant has in fact improved its management.

AMBIO also has experience using external funds, having accessed the Fondo Conservacion de Triunfo near El Triunfo reserve, using this to conduct a study on capacity building, identify with the restoration, and forest management strategies. In addition, they have accessed larger multilateral funds.

7.2.7 ProNatura-Sur

ProNatura-Sur has put forth the proposal in the Sierra Madre to actually quantify the carbon in its projects; current projects are extensive, including the detailed project on palm in the Sierra Madre.

7.2.8 ECOSUR

The University’s scientific teams have assembled extensive forest data, and are preparing an IPCC tier 3 baseline for Chiapas.

7.2.9 El Triunfo Fondo

This private fund provides grants to NGOs for the Chiapas region of El Triunfo.

7.2.10 UNICACH

This university is assisting with GHG inventory and future climate scenarios.

7.2.11 CONAFOR/ProArbol/PSA and IIPBE/Regional Resource Centers (Centro Regional)

IIPBE also established municipal resource centers in three areas of the state. These are areas where the citizens and technicians can go to access resources on fire prevention as well as ProArbol. Regional centers also provide technical assistance on several subjects. In areas where regional centers are already well used, (such as near Tuxtla), these could form one base of information for REDD+.

7.2.12 Secretaria de Campo

Secretaria del Campo has programs to train landowners on new crop farming, cattle management, and an initiative backed by IIPBE to train people to keep 10% of their land forested in exchange for the alternative crop. Courses for landowners cover the types of crops that work best and how landowners can increase productivity.

7.2.13 GEF

CI applied for a large adaptation and climate project, funded by the GEF, in La Encrucijada – the key mangrove and wetland protected reserve in Chiapas.

7.2.17 Improving stakeholder coordination

This extensive list shows there are many stakeholders involved in land management in Chiapas. There are possibilities for these players to better integrate their work and improve efficiency and coordination. Some issues and suggestions are:

- A major problem for staff of the state protected areas is access to data— the state statistical agency and other agencies often are not allowed to share their most recent data. Most exchange of data is based on personal relationships. The search for new data is a constant struggle, and members of the team
confirmed that easier access to data would improve their ability to effectively protect state areas. Such barriers to access and availability of data, which should be public and readily available, represent a major obstacle to transparency for an operational strategy for REDD+ in Chiapas and will likely hinder outside investment in REDD+ unless it is addressed.

- SEMAVIH could consider approaching the UNDP to build off of this existing group in order to reach grassroots stakeholders in UNDP areas.
- The government and NGOs should evaluate the UNDP methodology for participatory processes to determine if it can be more broadly applicable.
- CI and AMBIO are good example of how NGOs can grow into new projects when they work together. As part of the Critical Ecosystem Partnership, a large-scale fund coordinated by CI, they are expanding to add more community initiatives—for a total of 22—this year in Lacandona and Sierra Madre, including near El Triunfo and Pico de Loro. In this case CI will provide funding, facilitation, and experience working with coffee growers. AMBIO in turn provides largely the role of the implementer and the long-term experience of community liaisons, and the rigorous Plan Vivo verification.

7.3 Chiapas Map and Studied Areas (Attached on CD)
8 Bibliography


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