Forest Carbon Partnership Facility (FCPF)

Readiness Preparation Proposal (R-PP) Template

The World Bank does not guarantee the accuracy of the data included in the Readiness Preparation Proposals (R-PPs) submitted by REDD Country Participants and accepts no responsibility whatsoever for any consequence of their use. The boundaries, colors, denominations, and other information shown on any map in the R-PPs do not imply on the part of the World Bank any judgment on the legal status of any territory or the endorsement or acceptance of such boundaries.

Overview of the R-PP Template

1. The Readiness Preparation Proposal (R-PP) is a document designed to assist a country prepare itself for reducing emissions from deforestation and forest degradation (REDD), in order to become 'ready for REDD'.
2. REDD is understood to include all the elements mentioned in the Bali Action Plan, Section 1 (b) (iii), as further interpreted by SBSTA, which calls for *"policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries*." This set of activities is also officially referred to as "REDD plus".
3. The R-PP provides a framework for taking stock of the national situation from the point of view of deforestation and forest degradation, and addressing this situation by analytical work to be undertaken in a range of areas and funded from a variety of sources. Specifically, the R-PP would propose work to be undertaken and funded to prepare the following core components of 'REDD readiness':
    i. An assessment of the situation with respect to deforestation and forest degradation;
    ii. REDD strategy options (a set of actions to reduce deforestation and/or forest degradation, that addresses the drivers of deforestation and degradation identified in the assessment above) and the REDD institutional and legal implementation framework necessary to realize these options;
    iii. A reference scenario (also referred to as a scenario of forest cover change and emissions) for greenhouse gas (GHG) emissions from deforestation and/or forest degradation; and
    iv. A monitoring system to measure, report and verify (MRV) the effect of the REDD strategy on GHG emissions, livelihoods and biodiversity.
4. Through its R-PP, the country lays out a roadmap of preparation activities needed to undertake the work in the core components listed above, indicating:
    i. How REDD preparation work will be organized and managed in the country;
    ii. What capacity building and financial resources are needed and who would provide them (e.g., domestic agencies, NGOs, foundations, private sector, international donors, etc.); and

iii. A clear plan, budget and schedule for the identified activities, including the support foreseen from the FCPF.

5. The R-PP development process should be a significant, inclusive, forward-looking and coordinated effort undertaken in consultation with all major stakeholders in the country about their ideas and concerns regarding REDD, with a view to reaching a common vision of the role of REDD in national development.

6. The national focal point for REDD is strongly encouraged to share the R-PP with as many of the stakeholders referred to in the R-PP as possible, and to engage in discussions with these stakeholders on the R-PP as soon as possible. Consultation with major representative stakeholders could then be followed up during the work funded by the R-PP by broad-ranging and targeted consultation with all major affected stakeholders, as provided for in the Consultation and Participation Plan.

7. A template is provided below to guide the country in developing its R-PP. The product addresses the core components of REDD readiness, and is comprised of two parts for each component:

   i. A thoughtful description and discussion of the situation and issues and early ideas for what to do in the future in relation to each component (e.g., studies, data collection, pilot programs, workshops, etc.). The body of the R-PP template contains a text box to this effect in each component. Feel free to expand the size of the box as necessary, but strive to limit the length of each box to the page length estimates if possible; and

   ii. An optional annex allowing the country to present more details, or a fuller plan and/or terms of reference (ToR) for the work to be undertaken for that component. Important information should not be left in the annexes only; instead it should be presented, or at least summarized, in the main text of the R-PP.

8. Please keep the length of the body of the R-PP to 50-75 pages, and the total length of the document (including annexes) to a maximum of 100 pages. Avoid providing information that is not directly relevant to the topics covered by the R-PP components. Well-conceived ideas may be better expressed in fewer words. More concise presentations are also likely to facilitate the communication, consultation and discussion efforts that will be required to arrive at a national approach to REDD readiness.

9. The outcome of the REDD readiness preparation phase is a Readiness Package, which is expected after the execution of the studies and activities proposed in the R-PP and consists of the following elements:

   i. Studies and actions implemented to date (in the context of the execution of the R-PP): implementation actions that have already occurred as part of the national preparation for readiness, e.g., enacted legislation or regulations defining carbon rights, establishment of monitoring plots, creation of new funding mechanism, etc.; and

   ii. Actions still being planned: A forward-looking part, which specifies what remains to be done to achieve the state of REDD readiness for positive incentives.

10. Please update the Table of Contents before finalizing and submitting the document.

11. The national focal point for REDD should submit the completed R-PP using the attached template to the FCPF Facility Management Team at fcpfsecretariat@worldbank.org.

12. This R-PP template replaces the previous R-Plan template, and the R-PP template version 1, for the readiness formulation phase.

Box 1: Early Lessons from the First FCPF R-Plans/R-PPs

Assessment of the first three R-plans (now R-PPs) at the Participants Committee meeting in Montreux in June 2009 suggests the following early lessons for countries preparing an R-PP:

1. Invest significant effort in the Assessment of Land Use, Forest Policy and Governance: Detailed qualitative and quantitative analysis of existing data and studies of land use trends and previous efforts to slow deforestation is required, in order to provide insights for the REDD strategy development. Trends in sectors outside forests (e.g., mining, agriculture, transportation) may be important drivers of deforestation and degradation. REDD strategy programs and actions need to respond to specific drivers in given regions and socioeconomic conditions in the country. Try to address all major drivers and regions with REDD strategy elements, or the solution will not match up with the causes.
2. Begin consultation on the R-PP during the development of the R-PP, with representative major stakeholders, and discuss the structure of the Consultation and Participation Plan required in this R-PP: Please discuss the consultations held to date, and the plans for further consultation, especially with forest-dependent indigenous peoples and other forest dwellers.
3. REDD task force composition and national REDD management processes need to be cross-sectoral and engage major sectors and stakeholders with a role in deforestation trends, or potential REDD strategies: Some task forces described to date were dominated by a single forest agency, and assessment of the R-PP recommended broadening the group to include other key agencies (e.g., agriculture, mining, transportation) and interest groups.
4. Address potential REDD institutional arrangements and governance issues as thoroughly as possible. Assessment of the initial R-PPs included discussion of governance issues in the REDD context, and whether a country had recognized the need to consider them. For example, does the country recognize it needs to evaluate current institutional arrangements, functioning, transparency, equity, etc. relevant to its proposed REDD strategy and programs? Are there uncertainties regarding land tenure arrangements for some land uses or types of land ownership, and do they pose a barrier to realizing some specific proposed REDD programs?
5. Provide significant detail wherever possible: More general descriptions of REDD activities and consultations to date and planned were the source of significant discussion in the assessment of R-PPs to date. Lists of potential activities are less useful than the provisional selection of a few specific, high-priority activities that can be described in detail. Please include all important information necessary to describe the full set of proposed activities in and background for the R-PP right in the text under the proper component, rather than in a set of many annexes. Use the annexes for supplementary material, not to provide information essential to understanding your R-PP.
6. Clearly identify which of the many activities discussed in the R-PP you are requesting financial support for from the FCPF, and which would be supported by other potential sources of funding: The summary budget tables after each component in this template should be used for this purpose.

Forest Carbon Partnership Facility (FCPF)

Readiness Preparation Proposal (R-PP)

Country Submitting the Proposal: MÉXICO

Date submitted (or revised): February, 2010

R-PP Table of Contents

General Information

1. Contact Information

Please provide the details for the national REDD focal point submitting the R-PP in the table below.

Name	Dr. Juan Manuel Torres Rojo
Organization	National Forest Commission (Comisión Nacional Forestal)
Title	General Director (Director General)
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Website	www.CONAFOR.gob.mx

2. R-PP Development Team

Please list the names and organizations of the authors and contributors to the R-PP (insert as many rows as necessary in the table below).

Name	Organization
Bernardus H.J. de Jong	El Colegio de la Frontera Sur
Leonel Iglesias Gutiérrez	Comisión Nacional Forestal
Judith Dominguez	El Colegio de México
Fernando Paz Pellat	Colegio de Postgraduados
Víctor Eduardo Sosa Cedillo,	Comisión Nacional Forestal
Sergio Graf Montero	Comisión Nacional Forestal
José Armando Alanis de la Rosa	Comisión Nacional Forestal
Gmelina Ramírez Ramírez	Comisión Nacional Forestal
Ricardo Rivera Vázquez	Comisión Nacional Forestal
Elsa Peña Hazz	Comisión Nacional Forestal
Francisco Valadez Fernández	Comisión Nacional Forestal
Eduardo Villaseñor González	Comisión Nacional Forestal
Rigoberto Palafox Rivas	Comisión Nacional Forestal
Carmen Meneses Tovar	Comisión Nacional Forestal

3. Executive Summary

Please provide a one- to three-page summary of the R-PP in the box below: your assessment of the current situation, and your proposed activities and outputs for each component, and the total funding request and timing.

The R-PP is designed in steps to prepare Mexico for REDD-related funding mechanisms that reduce emissions from Deforestation and Forest Degradation, including the definition of an acceptable reference emission scenario, identification of the most promising actions to be taken to obtain the goals, a monitoring system that is required to assess the accomplishment of the goals, and a national carbon accounting system that allows for both national and project-type REDD activities.

The R-PP includes an extensive consultation procedure that is directed towards increased involvement of land users, governmental and non-governmental institutions in land-use policies and projects. The main consultation forum is the Environmental Services Program through its Advisory Technical Committee (CTC). The CTC set up in 2008 a REDD task force (See Annex 1b-2, page 64) and has been meeting regularly since then to discuss the major issues related to the readiness process for Mexico. Major policy issues will be treated in a REDD work group within the Climate Change Intergovernmental Commission (CICC). In both working group and task force, all stakeholders are well represented.

Particularly, the Agricultural Secretary (SAGARPA) has been invited to participate in the REDD preparation, as this is the most important Secretary concerned with land use and rural development. Synergic strategies will be developed to incorporate REDD-derived financing into a more comprehensive land-management program, based on community-type land-use planning tools (such as those developed by Procymaf (Community forestry program led by CONAFOR and financed by WB) and Plan Vivo managed by Scolel té (www.ambio.org.mx). These programs are directed towards developing land-use planning abilities in land-owners (communities, ejidos, private) to guarantee that long-term land-use projects, such as forestry related activities, are well-planned and agreed upon after consultation with the direct stakeholders.

CONAFOR will contract relevant organizations to develop the reference scenario of forest-based emissions, to coordinate the consultation process, and to help set up an independent monitoring and verification system. The most promising REDD actions and the identification of priority areas will be defined through an extensive consultation process with major stakeholder groups. It is envisioned that a government-independent body will be responsible for the carbon accounting system. International expertise will be required to verify all the steps of the R-PP execution.

CONAFOR contracted El Colegio de la Frontera Sur (ECOSUR) as member of the Mexican Carbon Program for guidance in the development of the R-PP, particularly the sections related to the consultation process, establishment of a reference scenario and the Monitoring, Reporting and Verification (MRV) requirements. The R-PP was developed through extensive consultation with the REDD-workgroup and the extended Technical Consultation Group on Environmental Services. Technical consultation will be required from these organizations during the development of the various activities defined in the R-PP and the design and implementation of pilot projects that are proposed, such as El Ocote pilot project and the Chiapas and Michoacán state-level REDD programs. Nineteen civil society organizations provided their advice to CONAFOR during the compilation of data, reports and assembly of inputs submitted by ECOSUR, during the working sessions of the REDD Workgroup.

According to the national forest inventory, Mexico has lost about 409.2 Mton CO_2e as tree biomass in the last 14 years (1993-2007) within the forest area. If we include the arid and semi-arid zones, then the figure increases to 521 Mton CO_2e. Those figures will mean a potential annual mitigation rate of 29.2 Mton CO_2e from forests and 37 Mton CO_2e including forests and shrubs (all 136 M ha).

The Quick Assessment paper has been written by Bernardus H.J. de Jong (ECOSUR); Leonel Iglesias Gutiérrez, José Armando Alanis, Gmelina Ramírez Ramírez, Elsa Peña, Eduardo Villaseñor and Ricardo Rivera Vázquez (CONAFOR); Judith Dominguez-Serrano (COLMEX); and Fernando Paz (COLPOS), in close collaboration with the Mexican REDD-task force, which has been chaired by Leonel Iglesias-Gutiérrez (CONAFOR). It is based on the analysis of recently published documents concerning analysis

of the forestry programs, characteristics and functioning of Mexican community forest management, and INEGI LULC maps of 1993, 2002, and 2007.

The R-PP includes an extensive consultation procedure that is directed towards increased involvement of land users, governmental and non-governmental institutions in land-use policies and projects.

The Plan Vivo tools will be strengthened through training and learning exchange under collaboration between the civil organizations AMBIO, the Mexican Fund for the Conservation of Nature (FMCN) and Reforestamos México.

CONANP, CONAFOR and various community and non-government organizations will strengthen the strategy and actions to improve the control and management of forest fires and the reduction of fires used in the agricultural sector, by means of promoting fire management techniques in both forested and agricultural land.

Component 1: Organize and Consult

1a. National Readiness Management Arrangements

Rationale

The purpose of setting up the National Readiness Management Arrangements is to manage and co-ordinate the REDD readiness activities whilst mainstreaming REDD into broader strategies such as the national low carbon strategies and national development plans. A country may approach the management arrangements for REDD via existing coordinating bodies or may establish a cross-sectoral and functional task force that is inclusive of key stakeholders with well defined roles and responsibilities essential for this purpose but which feeds into an overarching national climate change mitigation management arrangements. Such arrangements are likely to require the involvement of a number of government agencies (e.g., forests, environment, agriculture, transportation, Prime Minister's or President's office, etc.), civil society, and other affected stakeholders in a meaningful way.

Guidelines

Please use the following as a guide to explain the design and functions of the National Readiness Management Arrangements:

1. Describe the National Readiness Management Arrangements such as the design and methods of operation and the roles and responsibilities at various levels of management. Explain how Readiness activities for REDD will be coordinated, and ultimately, how REDD implementation will be managed. Present the composition of the existing or a new working group, i.e., names of the member ministries and agencies; key stakeholders and experts from NGOs, community-based organizations, Indigenous Peoples' organizations, private sector, etc.; and individuals represented in the working group that will be responsible for managing readiness. Also provide the name of the ministry/organization responsible for overall coordination of REDD activities and of donor efforts supporting REDD or land use activities.
2. Describe the specific roles and responsibilities of each member of the working group, if already defined, towards achieving the objectives of each component of the R-PP. Provide the relationship of the REDD working group to the existing working structure for national forestry and land use policy dialogue (in light of the need for REDD strategies to be integrated into the context of ongoing policy and stakeholder discussions on economic development, land use and forestry and national climate change mitigation action plans).
3. Explain the type of practical activities conducted as part of management of readiness, e.g., workshops, meetings for key government agencies beyond the forestry sector and other stakeholder consultations, modes of communication, outreach and communication and budgetary requirements. Include the schedule and sequencing of such activities.
4. Where readiness management arrangements are not yet established, explain the activities that would be undertaken (by the nodal agency) leading to establishing management arrangements (e.g., consultations for early engagement of government agencies, role of civil society including Indigenous Peoples, NGOs, donors, and assessment of current and potential roles and responsibilities for members of the WG).

Please provide the following information:

- **Summarize the National Readiness Management Arrangements in the box below in one to three pages;**
- **Provide a brief summary activity and budget and funding in Table 1a (detailed budget data and funding table go in Component 5);**
- **If necessary, attach a work program or ToR for activities to be undertaken in Annex 1a.**

Design of the REDD working Group:

The REDD-WG has been nominated in November 2009 by the Inter-secretarial Commission on Climate Change (CICC) in Mexico, which is comprised of the federal ministries of Environment and Natural Resources; Agriculture, Livestock, Rural Development, Fisheries, and Food; Energy; Communications and Transport; Economy; Tourism; Ministry of Social Development; Internal Affairs; Finance and Public Credits; Health; Foreign Affairs; with the Institute of Statistics, Geography and Information as Permanently invited federal institute.
(http://www.semarnat.gob.mx/queessemarnat/politica_ambiental/cambioclimatico/Pages/cicc.aspx). The REDD task force that prepared the R-PP is composed of representatives of governmental institutions (forestry and non-forestry), NGOs, Forest organizations, the academic sector, and financial institutes, as part of the permanent Technical Advisory Commission of the "Payment for Environmental Services" program of CONAFOR. The REDD-TF has organized monthly planning meetings since July 2008, when a workshop on REDD was organized by CONAFOR, to define forest for REDD, to discuss the R-PP and its components, and to define tasks for preparing the component documents.

The REDD strategy will be developed following the UNFCCC negotiations on REDD Plus, along two main activities and several studies:

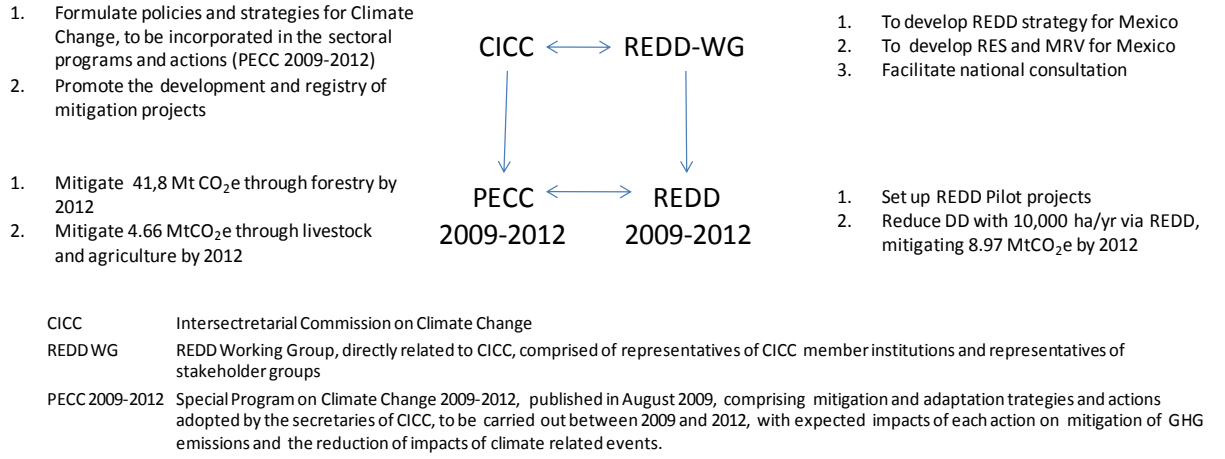
1. Development of a Reference Emission Scenario and monitoring, with specific studies on historical analysis of land use and land-use change, impact of recent land-use policies on DD, development of a deforestation and forest degradation risk map, identify priority criteria, design and implementation of a permanent monitoring system based on the integration of various satellite imagery and permanent and temporary monitoring plots, generate a national database on emission factors; develop a Reference Emission Scenario

2. Design and implementation of the REDD strategy, with studies on impact of the various land use policies on DD, such as sustainable forest management (through Procymaf), establishment of protected areas (CONANP), payment for environmental services, and the design of improved and new actions for REDD including the use of experience from the Mexican Forest Fund. All activities and studies will be carried out with national, regional and local consultations of stakeholder groups.

From July 2008 till present an ad hoc task force on REDD has been involved in designing the R-PP. The ad hoc REDD task force that prepared the R-PP is composed of representatives of governmental institutions (forestry and non-forestry), NGOs, Forest organizations, the academic sector, and financial institutes.

The official REDD working group (REDD-WG) will be installed with well-defined tasks, once the preparing documents are finished. The group will meet at least once a month to discuss progress of the R-PP, adjust schedules where required and prepare interim reports. They also schedule and coordinate verification of the R-PP and will be in charge of guiding the implementation of REDD, once it is ready to be executed.

REDD is part of the National Program of Climate Change (PECC) 2009-2012, and as such it is incorporated in a national land-use policy directed toward mitigating and adapting to climate change. The structure of the two bodies and their domains are represented in Figure 1 (See also component 2b).

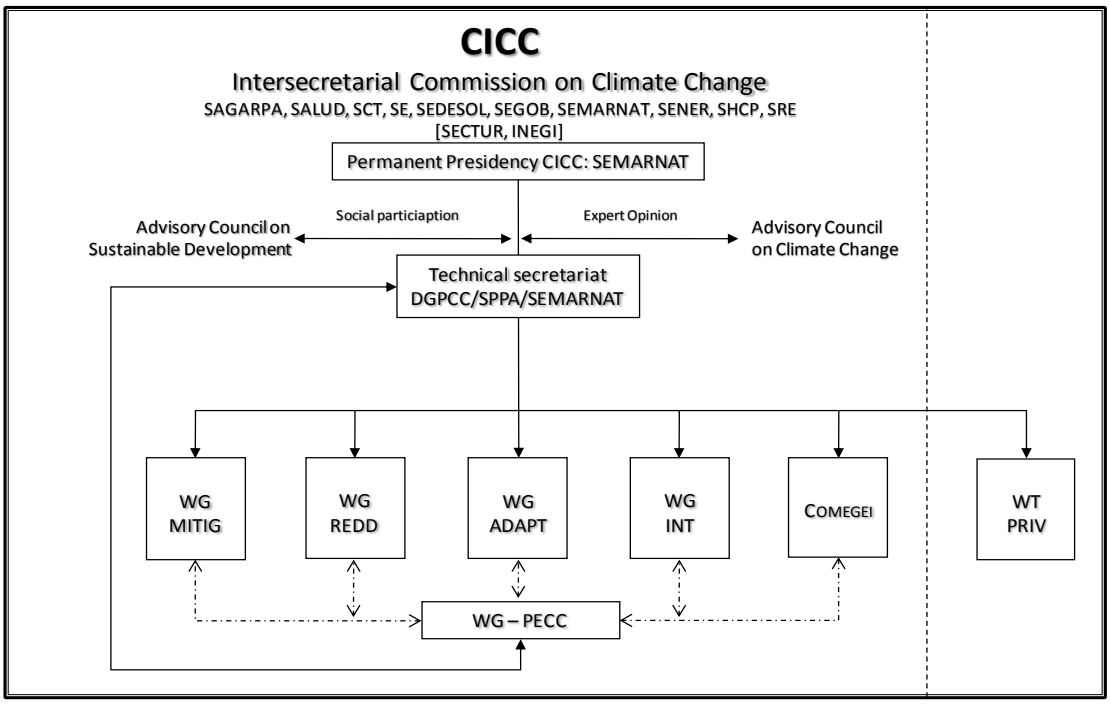


CICC	Intersectretarial Commission on Climate Change
REDD WG	REDD Working Group, directly related to CICC, comprised of representatives of CICC member institutions and representatives of stakeholder groups
PECC 2009-2012	Special Program on Climate Change 2009-2012, published in August 2009, comprising mitigation and adaptation trategies and actions adopted by the secretaries of CICC, to be carried out between 2009 and 2012, with expected impacts of each action on mitigation of GHG emissions and the reduction of impacts of climate related events.

Figure 1. *Relationship between REDD-WG and proposed actions and the special program on climate change (PECC 2009-2012), established by the Inter-secretarial Commission on Climate Change*

The Inter-secretarial Commission on Climate Change will be in charge of decision making on climate change issues, such as adaptation and mitigation policies, while CONAFOR will coordinate the implementation of the REDD-strategy in close collaboration with the REDD-WG and REDD-TF. Additionally, CONAFOR will hire an organization with the expertise to develop the RES (Reference Emission Scenario) and the MRV system and to lead the consultation.

The REDD WG is part of the CICC (Figure 2) and it will coordinate REDD related issues with the various ministries involved with land use issues. REDD is also part of the Green Agenda formulated by the government.



WG-PECC: Working group that evaluates compliance of the actions and goals of each ministry established in the PECC; **WT-PRIV**: Working table with the Private Sector [Goal PECCT.17];
WG-ADAPT: Working Group on Adaptation Policies; **WG-MIT**: Working Group on Mitigation Policies; **WG-REDD**: Working group on REDD Policies; **WG-INT**: Working Group on International Policies; **COMEGEI**: Mexican Committee for Emission Reduction and Sequestration Projects. **SAGARPA**: Ministry of Agriculture, Livestock, Rural Development, Fisheries, and Food;
SCT: Ministry of Communications and Transport; SE: Ministry of Economy; **SECTUR**: Ministry of Tourism; **SEDESOL**: Ministry of Social Development; **SEGOB**: Ministry of Internal Affairs; **SEMARNAT**: Ministry of Environment and Natural Resources; **SENER**: Ministry of Energy; SHCP; Ministry of Finance and Public Credits; **SSA**: Ministry of Health; **SRE**: Ministry of Foreign Affairs; **INEGI**: Institute of Statistics, Geography and Information (Permanently invited federal institute); **DGPCC/SPPA/SEMARNAT**: General Directorate for Climate Change of the Subsecretary of Planning and Environmental Policy of Semarnat.

Figure 2. *Structure of the Inter-secretarial Commission on Climate Change (CICC) and the various working groups that have specific tasks defined by the CICC.*

The R-PP is designed to develop a REDD system that incorporate effectively a national accounting system with local implementation of activities that at the same time increases forestry related revenues, leading to less dependency on imports of forest products, and increased involvement of local communities and other land owners in forestry related activities. The system will include social and environmental benefits, particularly biodiversity conservation and poverty alleviation. Therefore, a strategy needs to be developed that generate accountable emission reductions and at the same time offers the above-mentioned additional benefits, all at affordable costs and measurable at the same time. As mentioned earlier, this will be accomplished through active involvement of the landowners, who at the end will implement any activity designed for REDD. A national reference emission scenario will be developed that project expected emissions into the future, based on spatial analysis of historic land-use trends and impact analysis of LU-related government programs on DD. A set of criteria and indicators will be developed in close consultation with the stakeholder groups to identify key areas for REDD activities. A deforestation risk map will be generated, based on an analysis of underlying and proximate drivers.
A multi-scaled monitoring system will be put in place for REDD, based on satellite imagery interpretation and ground-based monitoring plots, in close collaboration with GEO (Mexico is selected as one of the demonstrator countries for the Carbon Tracking initiative of GEO). This will complement the basis for a national reporting system for REDD compatible with other national, state and project-based GHG-emissions reporting systems.

Roles of the organizations:

1. The REDD task force (TF): Institutions and civil organizations will continue to work together to build consensus on key issues for REDD. The REDD TF will organize monthly planning meetings, workshops and activities to define forest for REDD, to discuss the R-PP implementation and its components, and to define tasks for preparing documents and next steps.
2. REDD-WG: Main discussion forum for policy design on REDD and climate change within the CICC.
3. CICC: Inter-secretarial Commission on Climate Change will be the main channel for the implementing agency and REDD TF to communicate with the President and high decision making forum.
4. C4 (Advisory Council on Climate Change): Assist and advice the CICC on policy issues.
5. CONAFOR/SEMARNAT: REDD implementing agency.
6. DGPCC/SPPA/SEMARNAT: General Director for Climate Change of the Sub secretary of Planning and Environmental Policy of SEMARNAT. The institution that will make sure that REDD activities will be planned taking into account the national climate change policies.
7. SAGARPA. The ministry of agriculture will play one of the most important rolls together with the implementing agency, as both the land use change and forestry sub sectors are responsible for more than 100 tons CO2 emissions at national level.
8. CONANP: The National Commission for Natural Protected Areas will also play one of the most important rolls together with the implementing agency, since it is responsible for the management of more than 16 million hectares of forest with no other use but conservation and under high degradation risk.
9. INE: Main scientific branch to deal with reviews of products coming from FMC and to produce useful information for the implementation and monitoring activities.
10. FMC: Main contact of implementing agency and REDD TF with the academic and scientific institutions and organizations including most universities at national level. .
11. NGO´s: Extensive experience of NGOs that work in the various regions of Mexico whose lessons learned are and will be an important input in the design and implementation of a REDD strategy
12. CONABIO, SDI, SEDESOL, SAGARPA, CONANP and other federal agencies related to rural development and biodiversity conservation will play a fundamental roll on integration, which is considered a key element to prepare Mexico for REDD.

Table 1a: Summary of National Readiness Management Arrangements Activities and Budget (and hypothetical example)

Main Activity	Sub-Activity	Estimated Cost (in thousands US$)				
		2010	2011	2012	2013	Total
REDD TF management						
	Meetings of TF	$28	$28	$	$	**$56**
	Dissemination	$20	$20	$	$	**$40**
Hire 2 staff for task force	Hire information specialist	$45	$45	$	$	**$90**
		$	$	$	$	**$**
		$	$	$	$	**$**
		$	$	$	$	**$**
Total		**$93**	**$93**	**$**	**$**	**$186**
Domestic Government		$20	$20	$	$	**$40**
FCPF		**$28**	**$28**	$	$	**$56**
UN-REDD Programme		$25	$25	$	$	**$50**
Other Development Partner 1 (name)		$20	$20	$	$	**$40**

1b. Stakeholder Consultation and Participation

Rationale

The process of preparation for REDD readiness must be an inclusive and transparent one. One national agency or organization taking the lead and orchestrating the process should not prevent other stakeholders from being consulted or from participating. This applies to the initial phase of formulating the R-PP and to the later phase when the analytical work proposed in the R-PP is conducted.

Regarding the formulation phase, the country submitting the R-PP should give evidence of meaningful initial consultations with representative major stakeholders on the document. For the later phase when the contents of the R-PP are carried out, the R-PP has been designed to contain a Consultation and Participation Plan. This Consultation and Participation Plan looks forward in time once the R-PP has been funded, and is designed to increase the inclusiveness, transparency and accountability of decision-making over the lifetime of the preparatory work leading to REDD readiness. While implementing the contents of the R-PP and designing the various components of REDD readiness, the country applies this Consultation and Participation Plan by running the core components of readiness through the planned consultation process. This makes the Consultation and Participation Plan a central piece in the national process of getting ready for REDD.

Guidelines

Please provide the following information in this component:

1. Consultations in the development of the R-PP (required to summarize here): Detailed progress of consultations, participation and outreach efforts that have occurred to date in the development of the R-PP, including the Consultation and Participation Plan itself. Provide details on the consultations conducted so far to involve national stakeholders (from the public sector, private sector, civil society, Indigenous Peoples, NGOs, etc.), other national plans and programs for REDD; and the methods used for consultations for the different components of the R-PP. Provide summary reports of the consultation meetings, workshops, etc., e.g., dates and venues, list of attendees, issues raised, and how the feedback from stakeholders was incorporated into the consultation process. Provide information on the participatory mechanisms already in place or being planned to ensure the active and continuous engagement of forest communities in the preparation and implementation of the R-PP.
2. Consultation and Participation Plan (required to be included here), for continuing and expanding consultations over time on the various components of REDD Readiness once the R-PP has been funded and while the R-PP work is being performed, recognizing that consultation needs to be a continuous process informing decision makers on options to be considered: Please refer to and use the guidance note available at http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/FCPF_FMT_Note_2009-2_Consult_Particip_Guidance_05-06-09_0.pdf to develop this Plan, or use some equivalent methodology. Please also refer to the guidelines on social and environmental impacts, in particular on Strategic Environmental and Social Assessment, in Section 2d.

Please provide the following information in the two boxes below:

- **Consultations held so far in the development of the R-PP in one to five pages: Detail and document the contents of the consultation materials, the consultation outcomes, any next steps, and how the outcomes have been taken into account into the R-PP. If necessary, please use Annex 1b-1 to present additional materials.**

- **Full Consultation and Participation Plan in three to ten pages. If necessary, please use Annex 1b-2 to present additional materials. Note that the full Consultation and Participation Plan is required, not a summary or draft ToR.**
- **The summary budget and funding request in Table 1b (the detailed budget and funding data go in Component 5).**

Consultations in the development of the R-PP:

Consultation processes after R-PIN:

Once the R-PIN of Mexico was accepted by the World Bank, CONAFOR started a consultation process with various stakeholders and stakeholder groups. Below a short outline of the various actions undertaken, the stakeholders involved, and the outcome of each event or process.

July 7-8 2008: REDD Workshop in Guadalajara.

The objective of the workshop was to review the international context of REDD and the financing opportunities; to analyze the methodological elements of a REDD strategy; and to discuss the opportunities of REDD within the context of the Mexican forest sector.

About 70 persons attended the workshop, among others representatives from governmental institutions (CONAFOR, CONANP, Semarnat, INE), academic sector, national and international NGOs and financial institutions.

As a result of the meeting it was recognized that Mexico has a great potential to develop a REDD program rapidly, but that some key issues have to be resolved, such as developing a national monitoring system of Land use and Land-use change and a national registry of GHG. Among the relative advantages of Mexico were highlighted the existing LU regulations, the design and implementation of national forestry programs, land tenure security with few tenure conflicts, existing scientific and technical capacity relative to REDD, and the extensive experience of NGOs that work in the various regions of Mexico whose lessons learned are an important input in the design and implementation of a REDD strategy. Urgent actions are proposed to prepare Mexico for emerging REDD-based financial mechanisms, such as a participatory construction of the REDD strategy, a national monitoring system based on the experiences of the National Forest Inventory, exploring the alternatives available for financing REDD and REDD preparation, analyze the impact of the various federal programs on deforestation and forest degradation, evaluate the various options of REDD implementation, such as Sustainable Forest Management, Payment for Environmental Services, among others, identify the major causes of deforestation and forest degradation, and capacity building at various levels (governmental institutions, NGOs, landowners).

It was recognized that people in the field are expecting a contribution to their efforts of conserving the remaining forests that in turn are contributing to mitigate climate change, that there is a need to involve the agricultural and animal husbandry sectors in the discussions to design an integrated policy of Land use, that the technical and institutional capacities need to be integrated and that local land-use planning tools developed by CONAFOR and Plan Vivo are instrumental for any REDD implementation activity.

It was decided to start a REDD task force within the technical advisory commission of the CONAFOR – PSA program to develop a REDD preparation strategy according to the FCPF R-PP template.

From September 2008 onward the REDD task force (REDD-TF) has met regularly to define the national REDD preparation strategy, to discuss and agree upon the various components for the WB-FCPF REDD-preparation funding (known as R-PLAN, recently converted to R-PP) and to discuss and agree upon the national consultation strategy for REDD (stakeholders to be consulted, themes to be consulted, consultation methodologies, expected outcome of the consultations, decision-making protocols, among others).

The final outcome of the various meetings were: the definition of forest to be applied for REDD, the application of a national REDD strategy, possibly with a nested approach, monitoring, reporting and

verification methodologies to be applied for Mexico based on ongoing monitoring efforts such as the National Forest Inventory, how to define a reference emission scenario, based on a combination of the historical LU trends and an analysis of the impacts of the various LU programs on DD, including the recently developed forestry-related projects. Based upon this analysis the future DD trend will be estimated, including the expected impacts of the Special Program on Climate Change (PECC), developed by 10 federal secretaries, in which they estimate the mitigation and adaptation potential to climate change of their sectorial programs. A rapid analysis document of the forestry sector and land use trends was developed by the REDD-TF members. It was also agreed upon that the CONAFOR Pro-Arbol will be the basis to design a national REDD program (particularly their experiences with the Procymaf program), but other REDD strategy options will be analyzed and discussed and if considered appropriate, integrated with the Pro-Arbol and other federal projects. A coordinated system needs to be developed for the REDD strategy, in close collaboration with SAGARPA, CONANP, CONABIO, SDI, SEDESOL and other federal agencies related to rural development and biodiversity conservation. The integration is considered a key element to prepare Mexico for REDD. As such, the REDD-TF recognizes that a future REDD-related institutional body (with stakeholder group representatives) should be formally established as a subgroup of the Inter-secretarial Commission on Climate Change that is responsible of the PECC.

In November 2009, a high-level meeting was organized with representatives of the various CICC ministries, OSC, academic sector, and forestry related organizations, to present REDD within the context of the Mexican Climate Change Policy 2009-2012 and to discuss the positioning of REDD within the national land-use related policies. Based on the result of that meeting, it was decided to formalize a REDD Working Group directly under the CICC, and to develop and coordinate all land-use policies that could lead to DD. In this high level meeting it was also decided that CONAFOR will be the REDD implementing agency. Later on during the same month, the CICC met and decided to establish the REDD WG directly under the CICC, which places it at the highest possible integration level within the Mexican political structure.

At the sub-national level various REDD related meetings and conferences together with stakeholder consultation workshops were held in 2009, with participation of various state-level or local-level stakeholder participation. States, such as Chiapas and Michoacán have developed state-level working groups to help develop REDD at the state level. Close coordination within the national task force is established through representation in the REDD-TF.

Consultation and Participation Plan here:

Current consultation bodies and mechanisms applied by CONAFOR.

National Forest Council (CONAF). It was constituted under LGDFS (article 156), as an advisory group for providing guidance on forest related issues. Their attributions include monitoring and evaluation of the national forest policies and programs. CONAFOR is bound to ask for CONAF's opinion in matters of sectorial planning and regulation. CONAF is integrated by representatives of government institutions, landholder organizations, NGO's, organizations of the social and private sectors, academic and/or research institutes, and professional organizations; all of them are key stakeholders of the forest sector. The CONAF structure and functioning is replicated at the state level, which means that 32 State Forest Councils will also be consulted during the readiness phase and will be involved in the REDD implementation.

Technical Advisory Committee for Environmental Services Project. The Environmental Services Project has created an advisory committee involving the main stakeholders; the committee gives recommendations to improve operational rules of forest programs in order to increase their efficiency and effectiveness. Participation of NGO´s, landholder organizations, users of environmental services, private organizations and other government institutions are also part of this committee.

Regional or local consultations. Normally, every year when the forest programs and their rules of operation are to be published, a consultation process is initiated at a regional and/or local level.

Participation of stakeholders is encouraged and their recommendations and suggestions are incorporated into new rules for programs. This will be part of the REDD consultation mechanism to design and establish the rules of operation and the financial program. Important issues of the consultation process will include eligibility rules, and criteria and indicators to define financial assistance. State Forest Councils have been constituted all over the country to give guidance on forest related policy at state level and certainly they will be important forums for local consultation.

Discussions on REDD have started since august 2008 inside the Technical Advisory Committee of the Environmental Services Project; outcomes include the design of the consultation process that is presented below among stakeholders at different levels (national, regional or local) and key issues for designing a REDD strategy have been identified. Methodological issues have been discussed and agreed upon, such as establishing an appropriate reference emission scenario (baseline) and monitoring system; operational matters such as type of incentives, eligibility criteria, level of payments, implementing participatory approaches, sharing benefits among land holders, have also been discussed and will be incorporated in the consultation process. Others issues for the consultation process include indigenous rights, how to include marginalization indices of forest communities, and law enforcement and governance matters. The consultation process will allow CONAFOR to identify issues to be incorporated in the implementation of REDD.

CONAFOR is also involved in a discussion process among the key governmental institutes. CONAFOR is expected to coordinate the consultation process with active participation of the institutes of SEMARNAT (CONANP, PROFEPA, INE) and representatives of other sectors (SAGARPA, Secretary of Agrarian Reform -SRA-, Secretary of Social Development -SEDESOL-, among the most important secretaries). The process at the government level will include aspects such as the incorporation of the separate sectorial policies into a integrated land-use policy, design and implementation of incentive programs and institutional requirements to carry out these programs (capacity building, budget, etc), as well as the identification of the opportunities, weaknesses and threats. Discussions on methodological issues will involve consultation with national and international experts, particularly with issues such as reference emissions (national baseline) and monitoring system. Participation of institutes such as SEDESOL and National Commission for Indigenous Development (CDI) will guarantee that the incentive programs will distribute the financial or capacity building resources fairly among communities with forests, with special emphasis on indigenous groups and marginalized communities.

On the other hand, the involvement of institutes related to economic development, such as the Secretary of Communications and Transport (SCT) will allow CONAFOR to discuss the risks of deforestation and forest degradation when increasing the national network of highways and roads.

The consultation with subnational governments (state, municipality) and their institutes will be part of the regional consultation process, in which other interested actors will be involved. The consultation will be directed towards the definition of the role of the various local, state and regional actors in the implementation of the REDD program. Local involvement will be a key issue to guarantee good forest governance, implementation of environmental laws and an even distribution of the potential benefits of the REDD program.

The consultation process will be carried out at various scales: national, regional (state) and local. The national consultation will be feasible trough the already existing consultation bodies, such as CONAF and the technical consultative bodies. At the regional level, participatory workshops are being planned at either state or regional level and other consultative bodies, such as the Sustainable Development Commissions, will be used to discuss the REDD mechanisms. The consultation process will be designed and implemented by experts from relevant organizations, such as Colmex in close coordination with CONAFOR, PMC, WWF and others. In indigenous regions, regional and local traditional authorities will be invited to participate in the process.

Indigenous peoples and other forest-dependent groups.

The owners of the forest land will be an active group in the consultation process, to assess the feasibility, to help design REDD mechanisms, and to adjust when necessary the financial assistance schemes of REDD (including financial compensation and technical assistance). In the consultation process, special attention will be given to indigenous communities and marginalized groups as

potential beneficiaries of the REDD scheme, in order to identify barriers that could prevent their participation in such schemes and to promote fair distribution of potential financial and other type of benefits.

Objectives of the consultation process:

Identify the main causes of deforestation and forest degradation and to generate an inclusive, transparent and co-responsible decision-making process in relation to the implementation of a long-lasting REDD program, by means of a consultation procedure that generates tangible benefits for local communities and other forestry-related actors.

Consultation plan

The REDD consultation plan refers to a continuous process that intends to incorporate all actors in the design and implementation of a REDD program in Mexico. The consultation will be carried out in 4 phases:

a. Preparation and dissemination of the consultation
b. Pilot consultation exercises to adjust methodologies
c. Application of the consultation at a national level
d. Dissemination of the results to obtain improvements through feedback

The main strategy of the consultation process is focused on a phase-wise increasing involvement of the various institutional actors by means of initially informative meetings and workshops with key stakeholder representatives, later on followed up by group meetings and participatory workshops with forestry-related groups. Simultaneously certain social techniques will be applied to obtain complementary information, such as structured questionnaires and interviews. A brief description of the 4 phases:

1. <u>Preparation and dissemination of the consultation</u>

The first phase of the consultation comprises of 2 activities: preparation of the consultation and its dissemination. Various meetings with the key actors will be carried out to define criteria and indicators for the consultation, what will be the decision-making procedure, what actors will be involved in the consultation process and how the consultation will be carried out (level: national, regional, state, municipality; methodologies: workshops, interviews, informative meetings; etc). The objectives of this phase are:

a. To define a common consultation starting point of what REDD implies and its expected positive and negative impacts on the current forest administration.
b. To disseminate the opportunities offered by REDD in Mexico
c. To select the pilot consultation areas
d. To design and prepare the methodology to be applied in the pilot consultation

2. <u>Pilot consultation exercises to adjust methodologies</u>

The second phase comprises of 2 activities: selection procedure of the pilot areas, based on facilities available to coordinate the activities, facilities available to communicate with the various actors, relative importance of the region in terms of forest governance schemes, based on the experience and historic knowledge about community forest management. Workshops in each of the selected pilot areas will be organized, applying group techniques, such as “Goal Oriented Project Planning” and “SWOT:

Strengths, Weaknesses, Opportunities, Threats". In this phase the pilot consultation model will be tested in three distinct zones and if necessary adjustment to the consultation instruments will be applied. The main objectives of this phase is to apply and if necessary adjust the consultation model in terms of the consultation instruments, workshop dynamics, and applicability of the consultation strategy.

3. The application of the consultation at a national level

In this phase the consultation will be applied in the whole country, stratified in three regions: Southern Mexico (mainly tropical dry and humid forests); Central Mexico (mainly upland pine, pine-oak and oak forests); and Northern Mexico (upland forests, dry tropical forests, scrublands). The main objectives of this phase are:

a. To apply the consultation instruments to all actor groups involved with forestry related activities and to agree upon procedures to involve the actors in future instrumentation of REDD.
b. To identify the actors involved in forestry related themes in each region.
c. To identify the interests of the forestry-related stakeholders
d. To identify opportunities and threats of forestry activities in each region
e. To obtain the information required to take decisions about the implementation of REDD in Mexico

4. The dissemination of the results to obtain feedback

Within this phase the results of the consultation will be disseminated and retro-alimentation will be requested from all groups involved in the process. The information obtained during the consultation process will be analyzed and the final results will be published in the various media and other dissemination strategies defined during the consultation process. The objectives of this phase are.

a. To analyze and report the information obtained during the consultation
b. To disseminate the results of the consultation
c. To design a mechanism to involve and communicate to the actors during the implementation of REDD, especially for indigenous and marginalized groups
d. To propose actions and activities for the REDD implementation in each region.

The consultation will be a continuous process during the REDD preparation phase with a mixture of the four phases executed simultaneously, as the various themes are progressing. The main subjects that will be incorporated in the consultation process are:

a. General understanding of REDD and its options within the Mexican LU policy.
b. Definition of REDD options and their expected impacts
c. Reference Emission Scenarios and Monitoring System (Scaling, priority areas)
d. Financial and crediting mechanisms

Schedule of Consultation (6-month periods):

Consultation theme	**1-2010**	**2-2010**	**1-2011**
Preparation and dissemination of the consultation	X	X	
Understanding REDD as an option	X	X	
Analyze REDD options and possible impacts		X	X
Reference Emission Scenario and Monitoring System	X	X	X
Financial mechanisms		X	X
Dissemination of results of the consultations			X

Table 1b: Summary of Stakeholder Consultation and Participation Activities and Budget

Main Activity	**Sub-Activity**	**Estimated Cost (in thousands)**				
		2010	**2011**	**2012**	**2013**	**Total**
Consultancy	Contracting consultants	$10	$17	$	$	**$27**
	Technical meetings	$10	$23	$	$	**$33**
Workshops	Communities	$20	$43	$	$	**$63**
	Experts	$10	$22	$	$	**$32**
	Capacity building	$18	$37	$	$	**$55**
Travel and misc	Travel	$15	$32	$	$	**$47**
	Materials	$5	$11	$	$	**$16**
Dissemination	Materials	$10	$28	$	$	**$38**
	Feedback	$10	$29	$	$	**$39**
Total		**$108**	**$242**	**$**	**$**	**$350**
Government		$40	83$	$	$	**$123**
FCPF		**$30**	**$65**	**$**	**$**	**$95**
UN-REDD Programme (if applicable)		$18	$37	$	$	**$55**
Other Development Partner 1 (name)		$20	$57	$	$	**$77**

Component 2: Prepare the REDD Strategy

2a. Assessment of Land Use, Forest Policy and Governance

Rationale

The purpose of the assessment of land use, forest policy and governance is to help the country identify key drivers of deforestation and/or forest degradation and review its past experiences with reducing deforestation and forest degradation, in order to identify promising approaches for the emerging REDD strategy. This analysis should provide data on land use and other trends and important insights into lessons learned, challenges, and opportunities to overcome those challenges. The REDD strategy should then be developed precisely to address the deforestation and degradation drivers identified in this assessment, and designed to overcome the challenges and previous program issues that led to underperformance.

Guidelines

Please prepare an assessment of land use, forest policy and governance using the guidance below:

1. Identify the underlying causes of deforestation and forest degradation, considering direct and indirect drivers and factors both within and outside the forest sector. Indentify major land use trends, land tenure and resource rights and issues and their implications for REDD.
2. Include an analysis of the performance of past efforts to reduce deforestation or forest degradation in your country, potential opportunities, and key barriers, to inform REDD strategy development. Present relative successes and shortcomings, leading to identification of major potential deforestation reduction approaches, by major cause and driver of deforestation and degradation. Identify the major relevant knowledge gaps that need to be analyzed in more detail. Countries may institute a new assessment or choose evidence-based causality analysis and existing studies/reports of assessments already available. The assessments should outline the economic, social, political, environmental and institutional context, identify the challenges to be addressed, the disaggregated data on these challenges and the causal factors. Include references to existing studies, data sources used in the assessment together with names of relevant Partners and organizations involved in the assessment.
3. Explain if and how the assessment has been consulted upon, and/or will be consulted upon as part the Consultation and Participation Plan discussed in section 1b.

Please provide the following information:

- **The Assessment in the box below in five to ten pages.**
- **Fill in the activity and budget in Table 2a for any follow-up activities or studies needed (detailed budget data go in Component 5)**
- **If necessary, attach additional materials, a further work program, or ToR for further work in Annex 2a.**

Land use and land-use change: Mexico has a wide variety of forest types covering a total extension of about 866,000 km^2 as of 2007. Most of the forests are either community (55%) or privately (35%) owned, with very few national forest lands. This particular situation requires extensive and continuous consultations with the land owners to develop any change in current land-use change and land-use policies. Historically, the LU policies were mainly directed towards the development of agriculture and livestock, at the cost of forests. Both deforestation and forest degradation are very relevant land-use problems, deforestation mainly driven by conversion to pasture and to a lesser extent agriculture, while degradation is particularly driven by shifting agriculture, extensive grazing and uncontrolled logging. The main causes of deforestation are complex and vary from region to region. High-input agriculture, such as the avocado plantations in Michoacan, conversion to grazing lands in the states bordering the Gulf of Mexico states and in the northern states, development of tourist infrastructure, such as the Mayan Riviera in Quintana Roo, and the small-scale conversion to slash-and-burn agriculture in the southern state, due to population pressure, are some of the major causes identified in the literature (eg. Garcia-Barrios, 2009).

Deforestation and forest degradation occurs in all forest types of Mexico. Between 1993 and 2007, the forested area in Mexico diminished from 68.86M hectares to about 66.46 M hectares, whereas scrubland diminished from 20.76 to 20.15 M hectares during the same period. Especially the degradation process was notorious during this period, with a net increase of more than 300,000 hectares per year of degraded forests and scrubland, both derived from degradation of mature forests and abandonment of non-forest land. According to the definition of forest adopted in a special workshop held on march 2, 2009, about 86.6 M hectares (as of 2007) are considered as forest. A preliminary analysis to evaluate the impact of land tenure on deforestation and degradation revealed that about 50.7% of the forest in 2002 is considered property of communities or ejidos and 27.6% is privately owned, whereas the remaining 21.3% is not officially delimited yet or is considered national forest. Net deforestation in privately owned forests was slightly higher than in forests owned by communities or ejidos (see annex).

Maps that demonstrate the distribution of the various successive phases of forests in 2007 are presented in the annex. Data is available on-line in www.cnf.gob.mx/emapas and also in the FAO Global Forest Resources Assessments 2005.

According to the INEGI ejido survey (2007), about 55% percent of lands are property of ejidos or communities (either agrarian or indigenous). Up to now there are no published studies available that have analyzed the effects of land tenure on deforestation and/or degradation at the national scale; nevertheless, risk of deforestation and degradation seems to increase in areas with unresolved land tenure conflicts; illegal logging and forest fires are the most common problems in these conflicting areas. Deforestation in areas where forest management plans are executed was significantly lower than in areas where no forest plans are established, which indicates that forest management may reduce deforestation. The same is true for areas within and outside federally protected areas (see annex).

Governance issues: Governance issues that have to be incorporated in REDD strategies include social organization within communities along forestry related activities, local leadership capacity building, participatory approaches within communities, and local consensus building mechanisms. CONAFOR has extensive experience trough the development of community forest management programs in the 6 most important states in terms of forestry and forest resources (PROCYMAF project).

Four key themes emerged from an external evaluation of the PROCYMAF project as important when designing and implementing forest management strategies aiming to be sustainable: (i) local governance, (ii) equitable and transparent decision-making, (iii) forest management based on sound silvicultural rules, (iv) community involvement in all aspects of REDD projects and (v) environmental awareness. The effectiveness of the process of verification is likely to depend heavily on good sectorial governance, and governance conflicts are likely to lead to different responses.

Technical and operative issues: Identified challenges include the establishment of and monitoring a national reference emission scenario; assessing and monitoring the effectiveness of individual activities within this implementation framework and ensuring that the system is both equitable and effective through appropriate management of revenues. Verification of both deforestation rates and project 'additionality' against a national baseline is expected to be primarily based on remote sensing technology, but it will require systems for 'ground truthing' the data gathered remotely, particularly where governance risks are

identified and biomass densities are unknown. A nested national, state and local monitoring system with coordinated national, state and locally-based carbon inventories is envisioned for Mexico. Satellite imagery to develop this system is already available at a regular basis. The monitoring system will initially detect changes within forested areas, but will eventually be able to generate annually national land-use land-cover maps and GHG emission reports. Community-based monitoring of carbon stocks is a common practice in the Chiapas Scolel Té project, while community-based sustainable management of the forest and dispersion of payments from a central financial mechanism to thousands of project owners are also a common practice in the programs of CONAFOR, and will be used as a basis for REDD-based projects (see ProÁrbol operation rules at: http://www.conafor.gob.mx/index.php?option=com_content&task=view&id=445&Itemid=518)..

Availability of data sources on GHG emissions, land use, forest and carbon inventories and deforestation: Total LU/LC and forestry related annual emissions (forest conversion loss of biomass and soil organic matter, forest under management, abandoned land) during the period from 1990 to 2006 were estimated between 69 and 86 million tonnes of CO2, with an average of 80 million tonnes of CO_2 per year (4a national communication to UNFCCC, http://www2.ine.gob.mx/publicaciones/consultaPublicacion.html?id_pub=615). Mexico is collaborating with Canada to evaluate the feasibility to apply the Canadian Forestry Service Carbon model (CBM-CFS) for the Mexican forestry sector.

Freely available satellite imagery includes daily coverage of MODIS (pixel size 250*250 m) through an antenna established at CONABIO (Mexico City) and ECOSUR (Chetumal). The Secretary of Marine (SEMAR) has a contract with SPOT to receive all SPOT 5 imagery (pixel size 10*10 m) with a frequency of about 16 days. Landsat 5 imagery is also available through the antenna established at ECOSUR (Chetumal).

National land use and land cover maps are available from INEGI at a scale of 1:250,000. The first series was developed during the 1970s and 1980s by means of aerial photography interpretation, with photographs taken at a scale in the range of 1:40,000 to 1:80,000 (photos are still available from INEGI on request). Series 2 covers the LULC of 1993 and is based on the interpretation of paper maps derived from Landsat imagery. Series 3 covers the LULC of 2002 and is based on digital interpretation of Landsat imagery, whereas series 4 covers LULC of 2007 and is based on interpretation of SPOT 5 imagery. All series have the same land use classes and thus can be used to estimate land-use change at a scale of 1:250,000. Forests are classified according to dominant species or physiological characteristics and each forest type is subdivided into 4 consecutive phases: primary, secondary with tree dominated cover, secondary with shrub-dominated cover, and secondary with herbaceous plant-dominated cover.

National forest inventory data are available from 1992-1994, comprising about 16,000 sites of 1000 m^2 established in conglomerates of up to 3 sites. A systematic approach was used to distribute the conglomerates.

In 2004 a newly designed National Forest Inventory was developed and between 2004 and 2007, about 24,000 geo-referenced permanent conglomerates were established and about 22,000 conglomerates were measured; each conglomerate has up to 4 sites of 400 m^2, with a total of up to 1,600 m^2 per conglomerate; about 20 percent of all conglomerates were re-measured in 2008. As of 2009, all mayor C-pools are included in the re-measurements. A total of 1'300,000 trees were measured during 2004-2007.

The Deforestation Risk Index (DRI) developed by National Institute of Ecology (INE)[1] identifies areas likely to be deforested if risk continues the same as before; remaining forest in Mexico was classified according to the deforestation risk (low to very high). Topographic conditions, road access and proximity to human settlements are the main variables explaining deforestation behavior in forest areas. Even though the DRI is not providing information on when and how much deforestation will occur, it indicates a relative risk of each forest area to be deforested, as deforestation is expected to take place first at sites with a very high risk. Knowing the rate of deforestation we can estimate where this will most likely occur (at least within well defined forest classes with known biomass densities). A similar effort was carried out

[1] Muñoz, C.; Alarcon, G.; Fernandez, J. (2003). Pixel patterns of Deforestation in Mexico 1993-2000 (Draft). INE Working Papers Series INE-0401. Instituto Nacional de Ecología, México.

in Chiapas, where deforestation baselines were developed to estimate the avoided emissions from deforestation (Castillo-Santiago et al, 2007; de Jong et al, 2005).

The main drivers of deforestation and degradation are conversion to pasture land, slash-and burn agriculture, and uncontrolled logging (over exploitation and/or illegal logging). In some areas forest fires and hurricanes also affect forest cover, especially in the tropical lowland forest area. At some extent, government subsidy programs have been identified as possible underlying factors, but studies are needed to estimate the impact of each program.

INE has estimated that 82% of deforestation occurred in Mexico as a result of land-use change to agriculture or grazing purposes; 8% due to illegal logging, 6% caused by forest fires and pests, 2% by authorized land-use changes and the last 2% by other causes such as hurricanes or other natural disasters.
Before 2000, land-use policy encouraged agriculture and animal husbandry; examples of those policies are a national law in the 60s and 70s, which promoted deforestation as a condition to assure land tenure. Effects of other programs on land use and land use change implemented in the forestry and agricultural sector, such as ProArbol (to promote reforestation and sustainable forest management), PROCAMPO (mainly for promoting cultivation of corn and beans) and PROGAN (promoting animal husbandry), are yet to be determined, although there are good examples of positive incentives to avoid deforestation and forest degradation throughout the PES program at:
http://www.conafor.gob.mx/index.php?option=com_content&task=view&id=363&Itemid=474.

Law enforcement: SEMARNAT issues authorizations to owners for harvesting forests, based on a technical study and a forest management plan as required by forest law. PROFEPA is responsible for enforcement of harvesting authorization.

Even though capacity for law enforcement has been increasingly growing since late 90s, when PROFEPA was created, and forest law clearly establishes measures to punish unauthorized land-use change and illegal logging, both causes of deforestation and degradation, there are not enough human and financial resources to effectively enforce laws. Furthermore, there are areas within the country where government personnel have limited access due to presence of organized groups of illegal loggers, drug traffickers and, in some specific areas, guerrilla groups, challenging local and federal authorities. These areas are identified by PROFEPA as critical areas.

Forest governance: Socially equitable organization within forest communities is a critical issue to deal with. Local experience and findings of some studies provide evidence that in communities with power inequalities within the group (ejidos or communities), agents with more power are able to impose higher costs on those with less power; on the other hand, powerful leaders in good organized communities may provide positive externalities to the group. Results of studies indicate that greater power inequality tends to lead to more illegal logging and more forest degradation.
Most of ejidos, communities and private forest owners are not organized enough for sustainable forest management; nevertheless good examples of communitarian forestry exist in some states. CONAFOR programs are intended to increase involvement of forest owners in sustainable forest management through a participatory approach. Communities in Mexico are a great force for both forest management and conservation, and there are many models for good resource management and forest enterprises, such as PROCYMAF which is a community forest management project in Mexico (http://www.conafor.gob.mx/index.php?option=com_content&task=view&id=97&Itemid=460). Expanding these models to other communities and ejidos require extensive community organization capacity programs, which in turn are time consuming processes, determined largely by local organizational conditions and decision-making processes.

Land tenure: Tenure rights are relatively secure in Mexico, although agrarian conflicts persist in some areas. About 85% of the land properties have been geo-referenced through a governmental program and official property titles handed over to the ejidos, communities and private land owners. The owners of remaining 15% were not interested in delimiting their property or the lands are located in areas with access problems due to presence of conflicting groups (political, drugs, organized crime). About 2 million hectares are disputed among indigenous groups or between indigenous and non-indigenous communities. Conflicts in land tenure increase risk of deforestation and degradation due to forest fires, over exploitation and illegal logging. Some of the conflicting areas are located within indigenous

communities.

Poverty: It is estimated that 12 to 13 million people live in forest areas in Mexico and about 5 million of them are indigenous people, most of them living in extreme poverty conditions (medium to very high marginalization levels, according to the National Population Commission marginalization index), with limited access to education, public services and labor; generally, poor people depending on firewood as energy source for cooking, which may cause forest degradation where firewood is scarce.

REDD challenges: Identified challenges to designing and implementing effective REDD strategies are a combination of: (i) strong environmental institutions; (ii) payments for maintaining natural forests, (iii) protected areas that effectively restrict certain land uses, (iv) support for community and indigenous forest management, (v) regular and systematic monitoring and analysis of deforestation and forest degradation, (vi) effective enforcement of rules and regulations regarding deforestation and degradation, (vii) infrastructure policies that prevent creating access to protected forested areas, (viii) macroeconomic and agricultural policies that make it less profitable to clear additional forest land for livestock and crops and (ix) closer collaboration between the various secretaries related to land use and land-use policies. The activities related to this component are included in the component 3, Reference Emission Scenario

Table 2a: Summary of Assessment of Land Use, Forest Policy and Governance Activities and Budget (Follow-up Activities Needed)

Main Activity	Sub-Activity	Cost (in				
		2010	2011	2012	2013	Total
Develop a proposal to expand current PROCYMAF local models to a **PILOT scale REDD sub-activities in at least 800 forest communities.**	(i) local governance	$257.0	$257.0	$257.0	$257.0	**$1,028.0**
	(ii) equitable and transparent decision-making	$257.0	$257.0	$257.0	$257.0	**$1,028.0**
	(iii) forest management based on sound silvicultural rules,	$257.0	$257.0	$257.0	$257.0	**$1,028.0**
	(iv) community involvement in all aspects of REDD projects and	$385.0	$385.0	$385.0	$385.0	**$1,540.0**
	(v) environmental awareness	$385.0	$385.0	$385.0	$385.0	**$1,540.0**
Hire 1 community forest management specialist for implementing agency	Hire PROCYMAF information specialist	$20.00	$20.00	$20.00	$20.00	**$80.00**
		$	$	$	$	**$0.0**
		$	$	$	$	**$0.0**
Total		**$1,561.0**	**$1,561.0**	**$1,561.0**	**$1,561.0**	**$6,244.0**
Government		$771.0	$771.0	$771.0	$771.0	**$3,084.0**
FCPF		**$385.0**	**$385.0**	**$385.0**	**$385.0**	**$1,540.0**
UN-REDD Programme (if applicable)		$385.0	$385.0	$385.0	$385.0	**$1,540.0**
Other Development Partner 1 (BILATERAL AGREEMENT)		$20.00	$20.00	$20.00	$20.00	**$80.00**

2b. REDD Strategy Options

Rationale

The purpose of the REDD strategy is to develop a set of policies and programs for addressing the drivers of deforestation and/or forest degradation identified in Component 2a, and hence reducing emissions from deforestation and forest degradation, in the context and in support of the national priorities for sustainable development.

Guidelines

Please follow the guidance below:

1. List the organization(s) that will prepare and coordinate the design and organization of the REDD strategy. If this information is already provided in Component 1a above, a reference to the appropriate section is sufficient.
2. Prepare the design work for the REDD strategy options to address the drivers of deforestation and/or forest degradation outlined in Component 2a. Strategy options and interventions that are robust in their ability to address the challenges identified in Component 2a for achievement of planned results will be required.
3. The work is likely to require an assessment of the various REDD strategy options from the following standpoints:
    i. Linkage between the proposed activity and the specific drivers of deforestation and forest degradation, for given land uses and socioeconomic contexts;
    ii. Costs and benefits of strategy activities being considered (including opportunity costs, investment costs and transaction costs). For assistance, see the FMT note of the costs of REDD on the FCPF web site;
    ii. Feasibility (socio-economic, political and institutional): Assess the feasibility of the options through analysis of socio-economic and political risks for the proposed options. Risks include domestic political risks for a new policy and uncertainties of the international policy process. Include an analysis of institutional capacity to enforce forest laws and governance issues for the identified options;
    iii. Sustainability and integration with other sector policies and strategies:
        a. Synergies (or conflicts) between the identified options and other national development priorities, including assessment of trade-offs across development goals or sectors (e.g., enhanced carbon stocks or land management capacity, but reduced local rural incomes or biodiversity in surrounding lands);
        b. Ways of mitigating conflicts or modifying the options to compensate affected institutions and various stakeholder groups.
5. Assess the risk of domestic leakage caused by the REDD policy options, i.e., the risk of strategy options displacing deforestation and/or forest degradation from one area to another within the country, through activity shifting or market leakage; and
6. Propose a process of development of REDD policy options, including a sequence and schedule of activities, and the consultation aspects (included in the Consultation and Participation Plan).

Please note that, at this phase, the requirement is not to reach agreement on the REDD strategy itself (as this may require analytic studies, consultations, etc., which are identified in the R-PP, but

have not yet been carried out). However, if the national REDD Strategy is already available, please provide it.

Please provide the following information:

- **A summary of preliminary REDD strategy options in the box below (in three to six pages).**
- **The budget and funding request in Table 2b (detailed budget and funding data go in Component 5)**
- **If necessary, attach the work program and/or ToR for activities identified to be part of the REDD Strategy as Annex 2b.**

The REDD strategy will be developed following the UNFCCC negotiations on REDD Plus, along two main activities including several studies:

1. Reference Emission Scenario and monitoring, with specific studies on historical analysis of land use and land-use change, impact of recent land-use policies on DD, development of a deforestation and forest degradation risk map, identify priority criteria, design and implementation of a permanent monitoring system based on the integration of various satellite imagery and permanent and temporary monitoring plots, generate a national database on emission factors; develop a Reference Emission Scenario (see component 3 and 4)

2. Design and implementation of the REDD strategy, with studies on impact of SFM on DD, impact of ANPs on DD, impact of PROCYMAF on DD, design of improved and new actions for REDD including the use of experience from payment for environmental services program and Forest Mexican Fund in CONAFOR. All activities and studies will be carried out with national, regional and local consultations with stakeholder groups.

Since 2001 CONAFOR has implemented a series of forestry related programs directed towards decreasing deforestation, increasing sustainable forest management and restoration of degraded areas. The lessons learned from these programs will be the basis to design the REDD related activities.

The potential REDD activities will be based on the studies of the main drivers of deforestation, along the line of Table 1.

Drivers of Deforestation	Strategies and potential action	Risks	Mitigation measures
Limited utilization of forested areas	Increase areas under forest management, development of other added value activities, such as payment for environmental services (PES), NTFP, certified forest products.	Initially low potential of high quality timber production, due to degradation of forests, limited resources for PES, require long-term investments. PES may reduce timber production in the short round, if PES is only directed to conservation of ecosystems and not focalized to degraded lands.	Actions to restore at least 12 million hectares of degraded forest back to productivity. Implement actions in priority areas first. Implement actions that avoid DD and maintain or increase the carbon stock through conservation and sustainable management of forests.
Lack of investment in forest related industries	Define priority production areas according to land attributes. Revise current government assistance for infrastructure and structure development in response to priority areas needs. Increase budget for forest industry for sustainable production of high quality forest products Promote synergies among local and national programs. Promote the demand of forest product and ecosystem services so that a market development can be set up at both community and national levels.	Limited resources available in the forestry sector, long-term commitments. Government assistance can create a subsidiary culture and make communities dependant from government initiatives only. The political parties system in Mexico could avoid reduction of subsidies to rural areas considering the risk of getting fewer votes because of subsidy reductions.	Work in the Congress promoting concepts, ideas and plans to create a Mexican cape and trade system. To promote products and services demand from the forest, to create a market supply. Make the best use of the REDD scope according to national circumstances, by including all areas.
Low forestry related opportunity costs	Development of added value projects of forest related activities. Increase certified silviculture activities to maintain forest stock. Perform studies for the development of opportunity costs indicators. Define the value of the ecosystem services	Pressure of non-forest related activities, which require close collaboration with other agencies. Monoculture production reduces interest to develop a market for the use of ecosystem services and alternatives different than timber.	Open a wide participatory process of consultancy and communication among stakeholders. Intensify actions of community organizations and land management. Let the community and relevant forest owners decide on actions against monoculture production.
Uncontrolled livestock activities in forested areas	Development of sustainable livestock practices in non-forest areas. Intensify the cooperation and synergies between SEMARNAT and SAGARPA. Design payment mechanisms that compensate the land owners for the livestock activities, so that they develop this activity in non-forest areas.	Lack of capacity in the livestock sector to develop alternative livestock practices. The livestock opportunity cost too high to substitute the income from that activity by a compensation payment mechanism.	Extensive training and finance to cattlemen to avoid extensive livestock production. Implement a real coordination among SAGARPA and SEMARNAT programs. Implement financial mechanisms that make higher payments compared to livestock opportunity costs.

Drivers of Deforestation	Strategies and potential action	Risks	Mitigation measures
Uncontrolled logging	Development of forest management plans, improved enforcement of compliance, engage communities in forest restoration and other forestry related activities. Develop an opportunity costs index and design a compensation mechanism for land owners to protect their own forests and to implement best management practices. Intensify the cooperation and synergies between the forest communities and institutions in charge of the forest governance, NGO´s and academics.	Introduction of exotic species, high costs of restoring degraded areas, with few perspectives of income on the short term (require combinations with short-term products, e.g. agroforestry). Lack of governance stops any initiative. Low enforcement does not go with the implementation of projects. Financial mechanisms are scarce and do not compete with illegal logging opportunity costs.	Extensive training and finance to forest owners to know REDD options. Implement a real coordination among communities and governance institutions. Implement financial mechanisms that make higher payments compared to uncontrolled logging.
Lack of security on user rights (timber, carbon)	Improvement of policies that address the development of efficient timber rights (plantations) and development of policies related to carbon rights. Increase the communication between different levels of government (legislative and executive powers) to develop user rights policies. Align international and national experiences to develop user rights policies. Implement a wide communication and consultancy program among and between forest owners.	Implementation of land-use related policies costly and require close collaboration with and of involvement of communities. Lack of consultancy and lack of all stakeholders involvement in the process leads to misinformation in the forest owner sector. Miscommunication leads to wrong actions from communities in relation to any REDD program.	Implement a legislative process to create lows in relation to carbon user/provider rights. Create sound government capacity and structure to implement consultancy and monitoring of social and environmental impacts. Set a communication program. Make communities and all stakeholders participatory of all process.
Poverty and lack of forestry related income opportunities	Development of forestry related economic activities at the community level. Development of a valuation index on ecosystem services at the community level. Develop a best management practices guidelines to avoid forest degradation and increase the forest value.	Lack of funding, require long-term commitments, as benefits generation may take a long time. Lack of governance avoids access to projects in the forest area. For some areas where the lack of income exist, the projects to stop DD are not an a ideal solution.	Funding directed to stop degradation makes land available for production in the long term. Production may come after, under sustainable bases. Conservation is a purpose but actions shell has co-benefits like poverty alleviation. Align programs to make a real synergy in relation to REDD +

Table 1. *Drivers of deforestation, strategies and potential actions, risks involved with the proposed actions and mitigation measures to be implemented*.

One of the issues to be resolved in the process of strategy development is how to define the costs related to the reduced emissions. Various factors may vary from region to region or even within one region. De Jong et al (2000) pointed out in a study carried out in Chiapas that that there are fixed costs and varying costs, among the latter are: opportunity costs (from negative to positive) and socio-economic costs of community capacity building (from 0 to infinite). On the other hand, carbon densities also vary according to forest type, ecological conditions and state of disturbance. This means that if a fixed price per unit of C-mitigation is adopted, the REDD activities will be concentrated in areas where the service can be provided with the lowest costs, which not always will be the areas with the highest priority in terms of biodiversity conservation and poverty alleviation. On the other hand, if a fixed prioce per hectare of forest is adopted, the mitigation potential per unit of US$ will vary according to the location of a particular REDD activity, so the final mitigation outcome of a financial revenue is difficult to predict. A financial system that takes into account both of these constraints is required.

The REDD strategy will be developed at three scales:

1. National,
2. State (priority areas)
3. Property level (community, ejido, private land owner)

At the national level the following activities will be developed:

A. Attending drivers of deforestation and degradation through federal programs:

- Improve national protected area system (more effective, increase, alternative economic activities).
- Develop more intensive, sustainable systems for animal husbandry in non-forest areas (e.g. Progan ecológico)
- Increase areas under sustainable forest management (more effective, increase in area, non-timber products, increase certified silviculture)
- Restoration of degraded unproductive lands
- Increase budget for forest industry to produce high-quality sustainable forest products
- Improve forest fire and forest pest control systems
- Promote energy plantations (fuelwood)
- Promote agroforestry
- Create and improve efficient markets of non-timber forest products

B. Development of REDD regulations and institutions

- Establishment of national REDD work group and task force.
- Establishment of a national accounting system and bureau.
- Establishment of a REDD payment distribution system (similar to the Pro-Arbol model).

C. Methodological activities

- Establishment of a national Reference Emission/Removals Scenario (RES)
- Establishment of a national MRV system

D. Capacity building

- Institutional strengthening
- Institutional Capacity building
- Stakeholder involvement in the REDD process

E. Community outreach

- Develop best management practices guidelines for communities to avoid forest degradation and increase the forest value.
- Intensify the cooperation and synergies between the forest communities, NGO´s, academics and government institutions to improve forest governance.
- Community capacity building to manage and monitor their forest resources.
- Implement a wide communication and consultancy program among and between forest owners.
- Development of added value projects at the community level of forestry related activities.

F. Economic incentives

- Promote the demand of forest product and ecosystem services so that a market development can be set up at both community and national levels.

- Design payment mechanisms that compensate the land owners for the livestock activities, so that they develop this activity in non-forest areas.
- Develop an opportunity costs index and design a compensation mechanism for land owners to protect their forests and to implement best management practices.
- Development of forestry related economic activities at the community level.
- Development of a valuation index on ecosystem services at the community level.

G. Integration of government programs and policies
Promote synergies among local and national programs.
Intensify the cooperation and synergies between SEMARNAT and SAGARPA.
Increase the communication between different levels of government (legislative and executive powers) to develop efficient user rights policies (harvesting, carbon; align international and national experiences to develop user rights policies).

At the state level (priority areas), the following activities will be developed

Methodological activities: establishment of a regional (state) RES and MRV

Institutional: establishing REDD working groups, stakeholder consultations, development of pilot projects, develop local capacities in the various activities designed at the national level (A)

At the landowner level, the following activities will be developed

- Develop landowner -level land-use planning instruments
- Generate forestry related capacities among landowners
- Improve community or ejido level organization

Objectives of the REDD strategy:

- To create an institutional and political structure that can deliver and administer measurable emission reductions, according to IPCC standards.
- Create a flexible and efficient financial revenue system to support the REDD related activities
- Develop a payment distribution system that optimizes emission reductions, biodiversity conservation and poverty alleviation.
- To develop a series of pilot demonstration projects in different socio-ecological conditions

Expected outcome

A REDD system that incorporate effectively a national accounting system with local implementation of activities that at the same time increases forestry related revenues, leading to less dependency on imports of forest products, and increased involvement of local communities and other land owners in forestry related activities.

Who will lead and coordinate the design and organization of the REDD-strategy

The Inter-secretarial Commission on Climate Change (CICC) will be in charge of decision making, while CONAFOR will coordinate the organization of the REDD-strategy in close collaboration with the REDD-WG. PMC will be contracted by CONAFOR to establish the RES and the MRV system and to lead the consultation.

Process how the REDD strategy will be developed, what elements will be analyzed and what stakeholders will be involved:

The REDD strategy has been discussed extensively within the ad hoc REDD-TF since July 2008. The RES and MRV related activities are explained in component 3 and 4 respectively. Stakeholder involvement in the various REDD related activities are explained in component 2b. For the activities that will lead to REDD, a series of documents of eligibility criteria, terms of reference, payment schedules, etc will be developed through extensive stakeholder involvement. Capacity building will be a key issue

during the REDD design and implementation phase. The REDD strategy process will be coordinated by CONAFOR, in close collaboration with the REDD-WG and contracted consultants, such as those under the Mexican Carbon Program. The required in-depth studies will be sub-contracted to various consultancy agencies and associated research institutes. Different stakeholders will be involved at the three levels of activities.

Required studies:

- Assess the cost and impact of the various LU related projects of the forestry and non-forestry sectors on DD.
- Develop a spatially-explicit study on opportunity costs of the various non-forest LU options.
- Assess the capacity building requirements of both governmental institutions as local land-owners.
- Develop a deforestation and forest degradation risk-index, in close collaboration with component 7.
- Assess impact of the various forestry and non-forestry projects on biodiversity and poverty.
- Assess the possible risks and barriers of implementing REDD projects.
- Barriers:
    - *Availability of technical capacity*
    - *Acceptance of REDD at the community level*
    - *National and local monitoring capacities*
- Risks
    - Initially low potential of high-quality timber production, due to current degraded status of forests, limited resources available to pay for environmental services PES and the requirement of long-term investments without short-term benefits (require forestry combined with the production of other goods that can be produced at a short term, e.g. agroforestry).
    - Limited resources available in the forestry sector for long-term commitments.
    - Government programs may create subsidy-dependency in communities or create pressure on forests of non-forest related activities.
    - Lack of capacity in the livestock sector to develop alternative livestock practices.
    - The livestock opportunity cost too high to substitute the income from that activity by a compensation payment mechanism.
    - Financial mechanisms are scarce and often do not compete in the short term with illegal logging opportunity costs.
    - Implementation of land-use related policies costly and require close collaboration with and involvement of communities.
    - Lack of mechanisms to actively involve stakeholders in the policy development process.
    - Lack of governance complicates access to projects in the forest area.

Strategies to deal with degradation and forest enhancement together

Although degradation is often a step on the road to full deforestation, in Mexico part of the forest degradation is the result of casual unsustainable uses of forest products (off-take > MAI) by communities in the vicinity of forests, for example for firewood or charcoal production, timber for local use and for grazing, rather than for large scale trade. There is evidence that in some places cattle herders prefer to put their cattle to feed in forests that are already partly degraded, which exacerbates the problem by hindering natural regeneration. These processes result in open secondary woodlands with low commercial value and considerably reduced biodiversity and carbon stocks, but on some places may never cause full deforestation. Here the degradation is a slow and steady process and although areas which are affected may be visible in remotely sensed images, changes in the biomass density from year to year in forests which are already partly degraded are impossible to measure from these sources. There is a positive correlation between population density and propensity for degradation, and an inverse correlation has also been observed between presence of electricity and rates of degradation. Whether this relation is simply a reflection of poverty, or whether in fact electric lights change the dependency of rural populations on fuelwood, has not yet been established.

The opposite side of the coin is that if management measures are initiated to bring off-take and MAI better into balance, there is likely also to be a forest enhancement effect. Once the pressure is removed, these degraded forests spring back to life and become rather productive, even if they do not

return to their original species mix. Indeed the annual increase in carbon stock may exceed the saving due to halting the degradation, by as much as three times. To achieve this it is not necessary to cease all off-take from the forest, simply to ensure that the off-take does not exceed the production capacity. Indeed production may be optimized by a well-planned removals policy (as in pruning). Since under the new policy drafts for REDD it appears that forest enhancement will in the future also be credited, it makes sense to promote the types of management which not only reduce degradation but which also result in enhanced forest stocks, if only because the carbon credits that could potentially be generated by the latter effect are considerable. Moreover, measurement of increases in standing forest stock is a much easier task methodologically than imputing avoided losses. The drivers of degradation are integral to the livelihoods of the local populations, and therefore the solutions have to be based on the participation of these local populations and have to provide alternatives which are acceptable. It is not yet clear what these might be, and therefore a phase of experimentation and consultation is required.

An important issue that will be treated in the consultation process is the following:

Impossibility of identifying the actors who will actually deforest. The calculation of opportunity cost for the purposes of REDD assumes that the actors who will deforest can be identified and paid an amount equivalent to or slightly greater than the opportunity costs, to keep the forest instead. Large parts of the forest belong to communities or ejidos and clearance occurs often in the informal sector without official permission, particularly in circumstances where the state does not have the resources or manpower to prevent it. Clearly to identify the potential individual who will clear a particular patch is virtually impossible, and under these tenure conditions that the projects need to be developed with active participation of the communities or ejidos, where well-established long-term agreements have to be developed, and clear governance rules designed (as in the case of the Scolel Té project, where 20 year agreements are established).

Schedule (1-year periods)

Activity	2010	2011
Assess the cost and impact of the various LU related projects of the forestry and non-forestry sectors on DD.	X	X
Develop a spatially-explicit study on opportunity costs of the various non-forest LU options.	X	X
Assess the capacity building requirements of both governmental institutions as local land-owners.	X	X
Develop a deforestation and forest degradation risk-index, in close collaboration with component 7.	X	X
Assess impact of the various forestry and non-forestry projects on biodiversity and poverty.	X	X
Assess the possible risks and barriers of implementing REDD projects.	X	X

Table 2b: Summary of Strategy Activities and Budget						
Main Activity	**Sub-Activity**	**Estimated Cost (in thousands)**				
		2010	**2011**	**2012**	**2013**	**Total**
Cost and impact of the various LU related projects	Contracting Consultancy	$50	$25	$	$	**$75**
Opportunity cost	Contracting Consultancy	$65	$35	$	$	**$100**
Capacity building requirements	Consultation	$85	$40	$	$	**$125**
Deforestation and forest degradation risk index	Contracting Consultancy	$55	$45	$	$	**$100**
Impact of LU projects on biodiversity and poverty	Contracting Consultancy	$75	$55	$	$	**$130**
Risks and barriers of REDD projects	Contracting Consultancy	$85	$55	$	$	**$140**
Total		**$415**	**$255**	**$**	**$**	**$670**
Government		$50	$25	$	$	**$75**
FCPF		**$150**	**$75**	**$**	**$**	**$225**
UN-REDD Programme (if applicable)		$130	$100	$	$	**$230**
Other Development Partner 1 (name)		$85	$55	$	$	**$140**

2c. REDD Implementation Framework

Rationale

The REDD strategy will be conceived and implemented in the context of the national development priorities, as discussed earlier. In many countries, these priorities are well established and the framework for implementing them may exist. However, a REDD policy is likely to require amendments or complements to the existing framework. The purpose of this component is to set out credible and transparent institutional, economic, legal and governance arrangements that may be necessary to enable the country to implement its provisional REDD strategy options discussed in Section 2b, and to meet potential country obligations under any future REDD regime. The success of REDD implementation is likely to be built on evident stakeholder confidence in the ability of the framework to create sufficient and fair incentives for the strategy options to be implemented.

Guidelines

Please discuss early ideas or analytic results on how to design the institutional, economic, legal and governance arrangements that may be necessary to implement the country's REDD strategy options discussed in Component 2b, and to meet potential obligations under any future REDD regime. Since these are new topics, the FCPF does not expect a country to have these arrangements and issues fully understood at this time.

Consider a discussion of the following questions and issues, and present a proposed work program to address them via analytic studies or other approaches to be undertaken:

1. Who owns the carbon?
2. Who is authorized to participate in domestic and/or international transactions based on GHG emissions reductions following reductions in deforestation and/or forest degradation?
3. What would be the role of the national government in these transactions?
4. How would the REDD revenues generated by these transactions be assigned and/or shared?
5. If the REDD strategy options involve interventions at the subnational level, how will the carbon, land use, and emissions accounting of these interventions be trued with or found within the national MRV system? Is a national registry for REDD necessary? What would be its scope?
6. Will the envisaged arrangements enable the country to comply with possible obligations under a future REDD regime, e.g., with respect to reporting?
7. What could be the checks and balances to be included in the implementation framework to ensure transparency, accountability and equity?

Please provide the following information:

- **Summarize the relevant information and ideas on your REDD implementation framework in the box below (in three to six pages).**
- **Fill in the budget and funding request in Table 2c (the detailed budget and funding data go in Component 5)**
- **If necessary, attach the work program or ToR as Annex 2c.**

Note: You may find it is easier or necessary to merge this Component with Component 2b. It may be hard to divide the presentation of the REDD strategy options from the implementation aspects, in particular in terms of the proposed R-PP assessment criteria.

Objectives for this component:

To develop the institutional, legal and political frameworks to enable REDD to operate at a national level, with implementation of activities at the local level, which can deliver real measurable reductions in emissions or increase in removals from Deforestation and Degradation of forests.

To develop a financial system that administer the various sources of revenues for REDD activities and related emission reductions.

Promote REDD projects that comply with other national development objectives, and that reduce the level of marginalization of rural communities, promote sustainable management of forest resources and conserve biodiversity.

Expected Outcome:

Set up of the institutional, legal and political framework for REDD

National system of Carbon accounting and registry of project activities

Financial revenue system according to well-established and agreed rules of operation

Activities to achieve outcome:

The main activities to be developed are grouped in the following categories:

1- Establishment of an institutional, legal and political framework for REDD (including national reference emission scenario and MRV system, to be treated in components 7 and 8)
2- Establishment of the rules of operation and governmental involvement, national registry of project activities, landowner involvement and financial mechanisms.
3- Definition of scale of activities, how to establish local RES and MRV within the national framework and how to implement in Mexico
4- Tracking and register of REDD activities and MRV system
5- Evaluate transaction costs of the various administrative options of REDD implementation
6- Emission reduction ownership and transfer rights.
7- Definition of the payment system (payment US/tC; US/ha, combinations?)

Partners and organizations involved:

CONAFOR, REDD-TF, CICC, C4, PMC, stakeholder groups.

Schedule and Sequencing of activities (6 month periods):

No	Activity	1-2010	2-2010	1-2011
1	Institutional, legal and political framework for REDD (including national reference emission scenario and MRV system, to be treated in components 7 and 8)	X		
2	Establishing the rules of operation and governmental involvement, national registry of project activities, landowner involvement and financial mechanisms.	X	X	
3	Definition of scale of activities, how to establish local RES and MRV within the national framework and how to implement in Mexico	X	X	X
4	Tracking and register of REDD activities and MRV system		X	X
5	Evaluate transaction costs of the various administrative options of REDD implementation	X	X	
6	Emission reduction ownership and transfer rights.	X	X	
7	Definition of the payment system (payment US/tC; US/ha, combinations?)	X	X	

Indicators of performance for this objective:

1.Registry system established

2. Institutional, legal and political setting of REDD established

3. rules of operation and payment revenue system established

Table 2c: Summary of Implementation Framework Activities and Budget						
Main Activity	**Sub-Activity**	**Estimated Cost (in thousands)**				
		2010	**2011**	**2012**	**2013**	**Total**
Workshops	Legal and political framework	$55	$35	$	$	**$90**
	Rules of operation	$65	$40	$	$	**$105**
Contracting consultancies	Legal and institutional framework	$35	$35	$	$	**$70**
	National registry and MRV	$35	$35	$	$	**$70**
Travel and misc	Travel	$20	$15	$	$	**$35**
	Materials etc	$15	$10	$	$	**$25**
Total		**$225**	**$170**	**$**	**$**	**$395**
Government		$120	$75	$	$	**$195**
FCPF		$35	$35	$	$	**$70**
UN-REDD Programme (if applicable)		$35	$35	$	$	**$70**
Other Development Partner 1 (name)		$35	$25	$	$	**$60**

2d. Social and Environmental Impacts

Rationale

The purpose of this component is to assess the likely impacts (positive and negative) of the REDD strategy options and implementation framework identified in Components 2b and 2c or that will be identified in the course of the preparation work. The spirit is that REDD, starting with the preparation for REDD readiness, should 'do no harm' and, instead, should 'do good'.

If a readiness grant from the FCPF is expected to support the preparation work, the World Bank's Safeguard Policies apply and have to be complied with (see http://go.worldbank.org/WTA1ODE7T0). The Bank's Safeguard Policies are designed to avoid, limit and/or mitigate harm to people and the environment, and strive to achieve benefits instead.

Social and environmental assessments help minimize or eliminate harm, or duly compensate negative consequences if these are inevitable, and shed light on ways to create benefits for people and the environment.

Guidelines

This section of the RPP should include a work plan for how to cope with the Bank's Safeguard Policies. A technical discussion should be initiated as soon as possible with the appropriate Bank staff or other experts regarding the choice of assessment techniques and their scope of application.

The level of detail of this component will depend on the phase of design of the REDD policy and implementation options. In particular, the choice of the assessment techniques may have to be refined in the next phase of the country's REDD readiness work, namely in the course of executing the work proposed in this R-PP.

Although the specific country context and the kind of activities proposed in each R-PP will determine how Safeguards apply, a promising approach is for the REDD country to prepare a Strategic Environmental and Social Assessment (SESA). The SESA is a tool that seeks to integrate social and environmental considerations into the policy-making process, leading to sustainable policies and programs.

The ToR for a SESA will need to be developed ideally as the R-PP is formulated, but at the latest prior to the signature of a grant agreement to support preparation for REDD readiness. The ToR should be informed by (i) initial diagnostic work, including (a) an initial analysis of the environmental and social context carried out for the purpose of components 1 and 2 of this R-PP, and (b) an initial stakeholder analysis designed to map out the expected outcomes, opportunities and risks related to the REDD and REDD readiness; and (ii) initial consultations conducted with representatives of key stakeholders and interest groups, including forest-dependent indigenous peoples and other forest dwellers in a transparent manner (please also refer to component 1b for more guidelines).

Incorporating these inputs, the ToR for the SESA must lay the foundation for: (i) continuing and completing the diagnostic work required, including a more structured and detailed stakeholder analysis; (ii) conducting transparent consultations involving representatives of key stakeholders and interest groups (including forest-dependent indigenous peoples and other forest dwellers, based on the principle of free, prior and informed consultation, seeking to build broad community support among concerned groups); and (iii) finalizing environmental and social management frameworks. These frameworks incorporate procedures for: (i) ongoing consultations with concerned stakeholder groups; (ii) capacity building measures as needed; and (iii) procedures for environmental and social impact assessments and action plans related to future programs and projects.

The assessments should give special consideration to livelihoods, rights (including those of Indigenous

Peoples), biodiversity, cultural heritage, gender, the special protection of vulnerable groups in society, capacity development, governance, etc.

Please provide the following information:

- **Insert the ToR for the SESA in the box below (in two to five pages);**
- **Fill in the summary budget and funding request in Table 2d (the detailed budget and funding data go in Component 5);**
- **Further guidance on this topic is being prepared and will be made available by the Facility Management Team.**

Introduction
The terms of reference of the Strategic Environmental and Social Assessment (SESA) of the REDD readiness activities will be developed and will include the strategy to evaluate the REDD related social and environmental benefits and impacts, particularly poverty alleviation and biodiversity conservation. A REDD strategy needs to be developed that includes the generation of accountable emission reductions and at the same time the above-mentioned additional benefits, all at affordable costs and measurable at the same time. This will be accomplished through active involvement of the landowners during the REDD strategy development, who at the end will implement any activity designed for REDD. Among the positive social impacts it is expected that REDD implementation will increase income of the most vulnerable groups (by means of prioritizing the REDD program to these groups), revaluation of the importance of forestry related activities for rural development, and capacity building (such as organizational capacities and project negotiation capacities of rural communities,). In order to guarantee these benefits and to ensure that the REDD implementation will not affect negatively vulnerable groups, a SESA will be conducted parallel with the consultation (component 2b). The design of the both activities will create the opportunity of communities to participate in the formulation of the REDD activities. It is expected that the evaluation will identify possible measures that have to be included in the project design to guarantee equal opportunities of all social groups to participate at free will in the future REDD activities. As such, the SESA will be developed according to the safeguards of the World Bank (WB), which stipulate that consultations with all vulnerable groups are required in any project financed by the WB.

Objectives:
The SESA will be comprised of two elements:
1. Environmental baseline studies that will be the basis to evaluate the environmental impacts of the future REDD activities.
2. The environmental & social assessment

Activities:
The activities to be developed in the first component will be the basis to assess possible environmental and social impacts of future REDDS activities and to identify measures to mitigate or avoid negative and to promote positive impacts. This will be important to ensure that the successful implementation of the future REDD activities and that possible affected people are compensated.

The baseline study will report the current environmental status of the forests where REDD may be implemented, that will be the starting point to monitor and evaluate future impacts of implemented REDD activities. The parameters to be measured and evaluated during the baseline study include physical, biological and socio-ecological components of the environment.

The environmental and social assessment study will assess the possible impacts of the implementation of the future REDD activities on the environment and social groups and will propose alternatives when required and available, to avoid or mitigate negative impacts.

The SESA will be coordinated by the REDD TF and specialized consultants (preferably experts in the area of social sciences) will be contracted to implement the study.

Proposed activities to implement the SESA include:

Review of federal and state policies that are related to forestry and natural resource management and conservation. This will provide the legal space for REDD and will identify possible adjustments required to implement REDD on a national, regional or local scale. This review will include the international agreements that are signed by the Mexican government. An essential part of the analysis will focus on available capacities ate the various policy levels to identify possible capacity building requirements. Comparable projects implemented by Conafor or Sagarpa will be analyzed in terms of their SESA related analysis and outcome. Projects that may be feasible for REDD that had negative impacts in the past on deforestation or forest degradation will not be considered as a potential REDD activity.

Consultations and meetings with stakeholders will be the most important activity in the SESA, as well as a desk review of all relevant documents. The activities will be coordinated with the REDD consultation process. Stakeholders will include all who will have a direct role in REDD implementation, groups that may be affected by REDD activities and other interested groups.

Expected Outcome:

The expected outcomes of the social assessment will be:

1. A brief description of the social characteristics and interests of the different groups, organizations and the private sector that may be positively or negatively impacted by the REDD implementation. The description will include an analysis of the organizational and negotiation capacities of the groups and organizations, the structure of decision making within the groups, and an analysis of the socio-economic, ethnical, cultural, gender, and age-structural differences between and within the groups, the spatial distribution of the groups and other variables that the consultant consider important.
2. Assess the local nature of the organizations and the formal and informal institutional roles and the relationship between the governmental institutions and the social groups and the effects these may have on the implementation of REDD.
3. Identify possible regional, social or cultural restrictions for the implementation of the project and uncertainties in the areas of intervention.
4. Evaluation of environmental and socio-economic impact of the various REDD options
5. Identification of potential additional social and environmental benefits or negative impacts of the REDD options
6. A proposal for dissemination, consultancy processes and social participation that may strengthen the implementation of the project, improve the social sustainability and an equitative distribution of the economic benefits.
7. Risks involved and trade-off implications of REDD options with other development programs (PROGAN, PROCAMPO) and how to address these. Risks include land tenure issues, religious or other social conflicts, project policies
8. Identification of vulnerable groups that may be negatively affected by REDD and measures that should be implemented to avoid or mitigate these effects.

The expected outcomes of the environmental assessment include:

1. Identify opportunities and possible negative impacts on the natural ecosystems and an estimation of the costs to mitigate the negative impacts
2. Level of environmental risks for each type of intervention and ecosystem
3. A brief description of the type and location of the ecosystems with a high potential for implementing REDD

The environmental assessment need to be coordinated with the evaluation of other programs of Conafor.

Methods to be used to achieve outcome:

Special studies will be carried out to assess the impacts, all in line with the WB SESA guidelines. Stakeholder consultation, surveys and analysis of various information sources will be the main methodological instruments used for the impact studies.

Activities :

The following activities will be developed:

1. Review of the proposals of REDD policies and definition of possible indicators that could be used to assess environmental and socio-economic impact of each option
2. Analyze available spatial-specific socio-economic and environmental databases
3. Identify the potential additional benefits of the REDD options at national, regional and local level
4. Assess trade-offs and risks involved with REDD options

SCHEDULE (6 month periods):

Activity	**1-2010**	**2-2010**	**1-2011**
Review of the proposals of REDD policies and definition of possible indicators that could be used to assess environmental and socio-economic impact of each option		**X**	**X**
Analyze available spatial-specific socio-economic and environmental databases	**X**	**X**	
Identify the potential additional benefits of the REDD options at national, regional and local level		**X**	**X**
Assess trade-offs and risks involved with REDD options		**X**	**X**

Table 2d: Summary of Social and Environmental Impact Activities and Budget						
Main Activity	**Sub-Activity**	**Estimated Cost (in thousands)**				
		2010	**2011**	**2012**	**2013**	**Total**
Identification of environmental and social indicators	Consultation	$35	$20	$	$	**$55**
	Analysis	$20	$20	$	$	**$40**
spatial-specific socio-economic and environmental databases	Contracting consultancy	$35	$35	$	$	**$70**
	Travel and misc	$25	$25	$	$	**$50**
Trade-off and risk analysis	Contracting consultancy	$35	$35	$	$	**$70**
	Travel and misc	$25	$25	$	$	**$50**
Total		**$175**	**$160**	**$**	**$**	**$335**
Government		$35	$20	$	$	**$55**
FCPF		**$60**	**$60**	**$**	**$**	**$120**
UN-REDD Programme (if applicable)		$60	$60	$	$	**$120**
Other Development Partner 1 (name)		$20	$20	$	$	**$40**

Component 3: Develop a Reference Scenario

Rationale

A REDD reference scenario (i.e., a scenario of forest cover change and greenhouse gas emissions over time for a country) is defined here as a combination of recent historical data on emissions from deforestation and/or forest degradation and other relevant land uses, and estimated future emissions and removals, leading to a national scenario through time of greenhouse gas emissions, in the absence of additional incentives for REDD.

Note: The term "reference scenario" has been widely used in the technical literature as a generic term,and is used here without any relation to UNFCCC policy discussions on this concept. The FCPF recognizes that countries may undertake work on a reference scenario through preparatory data collection and analytic work, and later refine their work to match UNFCCC guidance.

Guidelines

Please consider the following steps as you develop your proposal on how to prepare for establishing your reference scenario:

1. Review historical data available, drivers of deforestation and/or degradation, and identify data gaps that need to be filled in order to estimate past and recent land cover change and GHG emissions from deforestation and/or forest degradation, including assessment of national data gaps and capacity for, e.g., forest inventory data and its potential use for carbon density estimation, remote sensing techniques, GHG accounting and reporting capabilities.
2. Assess feasibility of options:
    i. Developing a reference scenario based on historical trends in emissions over the last decade or so; and
    ii. Developing forecasts for changes in forest cover and carbon density under current conditions, and different macroeconomic and development scenarios using projections into the future of historical trend data. This may involve the use of data and tools (e.g., GDP, population, agricultural expansion, and/or forest industry growth or other forecasts, national or sectoral development plans, specific investment programs, and/or adjustment coefficients otherwise derived from such factors and data).
3. Assess capacity needs for each option or the selected option:
    i. What additional data or capacity building is required for each of the options?
    ii. Is technical support available?
    iii. What is the scope for collaborating with national and international organizations?
4. Consider the potential benefits of preparing to establish a subnational reference scenario for each major province or subregion, linked up to a national reference scenario. If appropriate, explain how this approach would be organized, implemented, and be consistent with the national scenario.
5. Some countries have expressed interest in cooperating on analytic work on reference scenarios (and monitoring system design) at a multi-country regional scale, and then having each country select its own scenario, building on this common work. If this approach is relevant to your country, please explain how you expect this to work, what role your country would play, and how your country would eventually select its own reference scenario.

6. Consider linkages to the monitoring system design, in particular the forest cover change and emissions parameters that will need to be built into the monitoring system to ensure that comparable data are available in future years to compare to the reference scenario;
7. Undertake consultations on proposed options for development of a reference scenario, and possible choice of adoption of a national scenario with the relevant stakeholders.

Please provide the following information:

- **Summarize your proposed approach to establishing a reference scenario in the box below in about two to five pages;**
- **Fill in the budget and funding request in Table 3 (the detailed budget and funding data go in Component 5);**
- **If necessary, attach a work program detailing how outcomes of this component will be achieved and/or the ToR for specific activities as Annex 3.**

Objectives for this component:

1. Develop a reference scenario of future CO_2 emissions derived from continuing deforestation and forest degradation (DD), based on historical trends of land use and land-use change between 1990 and 2007.
2. Identify the forests that are under high risk, due to land-use drivers, such as access to and pressure on forest.
3. Analyze the impact of recent changes in forest policy on DD and estimate future impacts of continuing the Pro-Arbol program as stated in the National development Plan 1007-2012 and the National Forest Strategy 2025.
4. Identify priority areas for possible future actions that reduce emissions of DD according to the potential for emission reductions and social and conservation co-benefits.

Expected Outcome:

A reference Deforestation and Degradation of forest and emission scenario based on: 1) historical trend of Deforestation and Degradation of forests and derived carbon density changes, 2) likely areas to be deforested and degraded in the future based on driver analysis; 3) analysis of impact of recent LU policies (forestry, agriculture, animal husbandry) on Deforestation and Degradation of forests 3) expected impact of continuing land-use policy as stated in the National Development Plan, Special Program on Climate Change, and National Forest Strategy 2025.

Activities to achieve outcome:

1. Estimate forest conversion from 4-5 points in time, depending on availability of good-quality satellite imagery (e.g. 1990-1993, 1993-1997, 1997-2000, 2000-2002, 2002-2007). Scale defines level of uncertainty.
2. A spatial correlation analysis of DD in relation to drivers will be carried out to determine the deforestation and forest degradation risk, such as access or pressure
3. Analyze the impact of land-use programs on deforestation and forest degradation to be used to estimate the impact on DD of the National Development Program 2007-2012, Special Program on Climate Change 2008-2012, and the National Forest Strategy.
4. Develop biomass density maps of forests, according to eco-region, state, forest type, level of degradation, based on national forest inventory, state forest inventories and auxiliary data sources.
5. Develop a spatially-specific reference emission scenario, based on the integration of the results of the activities 1-4.
6. A priority index will be developed that identifies the key areas for future actions, according to indicators selected through stakeholder consultation. Some of the selection criteria: Risk, Quantity

of carbon, Social importance, Conservation

Partners and organizations involved will include among others:

ECOSUR, COLPOS, COLMEX, PMC, CONAFOR.

Other institutions may be sub-contracted

Schedule and Sequencing of activities to establish the reference scenario (4 month periods):

	2010			2011		
Activities	**ja-ap**	**ma-ag**	**se-de**	**ja-ap**	**ma-ag**	**se-de**
1. Estimate forest conversion in time						
Obtain imagery	X					
Adjustment of classification system	X					
Development of classification algorithms	X	X				
Classification of imagery and verification		X	X	X		
2. Development of Forest Risk Map						
Identification of drivers		X				
Analysis of past land cover change		X	X	X		
Modelling the process of change in relation to drivers			X	X	X	
Predicting course of change into the future (forest risk map)				X	X	
3. Analyze the impact of land-use programs						
Obtain specially specific data on land-use support programs, particularly Progan, Procampo, Pro-Arbol	X					
Select representative areas for analysis, based on program intensity and LUC dynamics			X			
Modelling the change of areas with and without support				X	X	
Predict impact of programs on future DD					X	
4. Develop biomass density maps of forests						
Calculate biomass densities of 2004-2007 inventory plots	X					
Estimate biomass densities of LU classes (2007 image-interpretation)			X			
Estimate biomass change within each class, based on 2009 inventory plots (20%)				X		
5. Develop a spatially-specific reference emission scenario					**X**	**X**
6. Identify the key areas for future actions						
Select criteria and indicators from	X	X				

stakeholder consultation						
Develop a spatial index, based on selected indicators and relative weights		X				
Identify key areas for future action		X	X			

Indicators of performance for this objective:

- A National reference emission scenario projected into the future, based on spatial analysis of historic land use trends and impact analysis of LU-related government programs on DD
- Set of criteria and indicators to identify key areas for REDD activities.
- Biomass density map
- Deforestation risk map, based on an analysis of underlying and proximate drivers.

ToR-First Draft

1. Estimate forest conversion from 4-5 points in time, depending on availability of good-quality satellite imagery (e.g. 1990-1993, 1993-1997, 1997-2000, 2000-2002, 2002-2007). Scale defines level of uncertainty.

CONAFOR will contract relevant organization to carry out the historical land-use change analysis. Such organization will be required to use satellite imagery with enough detail and quality that allow for a spatial definition of 1-2 ha per polygon. An Automated Object-Oriented Satellite Image. Classification Method developed by Colpos will be adjusted to include forest types and degradation phases as separate objects, based on height of the vegetation, coverage of pixel groups and auxiliary data, such as the INEGI land-use/land-cover maps. The years will be selected, based on available good-quality imagery (% cloud cover, haze and other atmospheric noises). The freely available Landsat imagery will be the basis of the historic land-use change analysis, complemented with other satellite imagery where necessary and available.

Various classification controls will be applied. For each land-use change trajectory, the change matrix will be analyzed for any non-plausible changes and these will be verified by visual analysis of each image by regional experts.

From the 1990-1993 imageries, the initial forest area eligible for REDD activities will be defined and used as a mask for future land-cover change analysis. Any 1990-1993 non-forest polygon will be excluded from any REDD activity. Future non-forest polygons will be added to the exclusion mask. The final 2007 forest-remaining forest will be the basis for future REDD initiatives.

For each period a deforestation and forest degradation matrix will be developed and spatially presented on maps. Regional variation of trend will be analyzed and possible factors influencing these differences identified. This will be the basis for the following activity

2. A spatial correlation analysis of DD in relation to drivers will be carried out to determine the deforestation and forest degradation risk, such as access or pressure (IDRISI)

Partners and organizations involved will include among others:

INE, CONAFOR, ECOSUR.

An analysis will be carried out to determine factors that have influenced the spatial variation in DD trends over time. Distance of DD to various aerial (such as cities, agricultural or farming areas), linear (Roads, rivers, coast) or point (settlements, markets) objects will be analyzed for each region and state. Increase in (rural) population and macro-economic drivers on DD (government programs, important agricultural products, government-induced settlement programs) will also be tested. A DD-risk map will be developed that classifies the remaining forest into 3-4 DD risk classes.

3. Analyze the impact of land-use programs on deforestation and forest degradation to be used to estimate the impact of PND 2007-2012 and National Forest Strategy 2025 on DD.

Partners and organizations involved will include among others:

PMC, ECOSUR, COLPOS

Both SAGARPA and CONAFOR have spatially specific data available of communities and private land-owners that participated in their various programs. These will be used to estimate their impact on DD based on the observed land-use trends derived from activity 1 (both positive and negative impacts).

4. Develop biomass density maps of forests, according to eco-region, state, forest type, level of degradation, based on national forest inventory, state forest inventories and auxiliary data sources.

Partners and organizations involved will include among others:

ECOSUR

Forest inventory data collected between 2004 and 2009 will be converted to biomass using nationally available biomass or the combination of volume equations, biomass expansion factors and tree density values, and where necessary complemented by IPCC default equations, tree density data or expansion factors. Biomass change within each plot and uncertainty levels will be estimated from data that become available in 2009 (re-measurements of 20% of the inventory plots)

5. Develop a spatially-specific reference emission scenario, based on the integration of the results of the activities 1-3.

Partners and organizations involved will include among others:

ECOSUR, COLPOS,

6. A priority index will be developed that identifies the key areas for future actions, according to indicators selected through stakeholder consultation. Some of the selection criteria: Risk, Quantity of carbon, Social importance, Conservation

Partners and organizations involved will include among others:

ECOSUR, INE, CONAFOR.

The selection of indicators will have a high impact on the final outcome of the selection of priority areas. Therefore a stakeholder consultation will be held to define the criteria and indicators and to assign relative weights to each. Selection criteria include social aspects, conservation importance, DD risk, biomass densities, among others.

Table 3: Summary of Reference Scenario Activities and Budget					
Main Activity	**Estimated Cost (in thousands)**				
	2010	**2011**	**2012**	**2013**	**Total**
Estimate forest conversion in time	$150	$150	$	$	**$300**
Development of Forest Risk Map	$75	$75	$	$	**$150**
Analyze the impact of land-use programs	$125	$75	$	$	**$200**
Develop biomass density maps of forests	$95	$90	$	$	**$185**
Develop a spatially-specific reference emission scenario	$105	$110	$	$	**$215**
Identify the key areas for future actions	$75	$50	$	$	**$125**
Total	**$625**	**$550**	**$**	**$**	**$1,175**
Government	$180	$160	$	$	**$340**
FCPF	**$225**	**$225**	**$**	**$**	**$450**
UN-REDD Programme (if applicable)	$125	$75	$	$	**$200**
Other Development Partner 1 (name)	$95	$90	$	$	**$185**

Component 4: Design a Monitoring System

Rationale

The purpose of the component is to design a monitoring system for measurable, reportable and verifiable (MRV) emission reductions and removals of greenhouse gases, and other benefits over time, in relation to a country's reference scenario. Countries undertaking REDD will need to demonstrate credible reductions in deforestation and/or forest degradation in comparison to this scenario in order to obtain performance-based financial incentives.

Note: The FCPF recognizes that countries may not be able to finalize the design of the monitoring system in the absence of definitive guidance from the UNFCCC policy process. Thus, it is conceivable that the monitoring system may have to be developed gradually, starting with data collection and analytic work, and with further refinements being made later on to match the guidance emerging from the UNFCCC policy process.

Guidelines

Please consider using the following steps as a guide to prepare the monitoring system:

1. Define the objectives and scope:
    i. What will the monitoring system be designed for, i.e., deforestation, degradation or both deforestation and forest degradation, other 'REDD plus' elements?
    ii. How will the emission reductions will be measured, reported and verified?
    iii. How will the system address forest cover change, carbon stock change assessment, carbon pools, changes in biodiversity, assessment of rural livelihoods;
    iv. How does it build on the existing environmental and social monitoring systems of the country?
    v. If it is a phased approach, describe the timeframe in which the phases will be developed and the key outcomes expected;
    vi. Describe the basis to be used for developing the monitoring system and reasons for the choice, e.g., IPCC tier 1 (far less desirable), 2 or 3, or another existing system.
2. Assess technological options and choice of methods to be used for measuring, reporting and verifying carbon stock changes. For example, how will a combination of ground-based inventories, remote sensing and other approaches be designed and implemented in a later phase?
3. Assess the rationale and cost effectiveness, and levels of uncertainty of the methods, bearing in mind the country context and the objectives and scope of the monitoring system.
4. Assess existing capacities and future capacities required: define the roles and responsibilities for design and implementation of measuring, reporting and verifying, including those for national institutions. Define capacity building, training, and hardware and software needed, including possibility of scaling up existing initiatives and collaborations.
5. Assess the scope and role for local communities, NGOs, various government agencies or institutes, and the private sector in the MRV system.
6. Assess systems/structures required for transparency, accessibility and sharing of data both nationally and internationally. Assess the financial support required and the sources of funding.

7. Consider the potential benefits of designing the system to integrate across subnational regions; or at a multi-country regional level, if either of these is relevant, based on your ecological, institutional and economic context.

Please provide the following information:

- **Summarize your proposed approach to designing the monitoring system in the box below in three to six pages;**
- **Fill in the budget and funding request in Table 4 (the detailed budget and funding data go in Component 5);**
- **If necessary, provide a more detailed plan and/or ToR for the necessary activities as Annex 4.**

Objectives for this component:

1. Design and implement a standardized national monitoring system based on the integration of satellite imagery and data collected at permanent and temporal sampling plots. Include information obtained from community-level monitoring systems, NGOs, etc.

The monitoring system will follow the methodologies proposed in the GOFC-GOLD Sourcebook of methods and procedures for monitoring and reporting GHG emissions and removals caused by deforestation, gains and losses of carbon stocks in forests remaining forests, and forestation (GOFC-GOLD, 2009).

The following elements will be included in the monitoring system:

1. **Assessing changes in land use over time (Deforestation and forest degradation).**

A monitoring system will be set up that keeps track of spatially explicit land-use conversions over time. A benchmark forest area map will be developed for the 2007, based on INEGI Land-use and Land-cover map, validated with satellite imagery from the same year. From this point, all future forest area assessments will be based in this benchmark forest map. This will allow to define the area for REDD monitoring in the future. Once the map is validated only change in pixel values will be used to assess deforestation and forest degradation. The benchmark map will include type of forest, degradation phase (according to the three or four classes used by INEGI), carbon densities in each forest type, and degradation phase of the forest in each polygon. The minimum mapping unit will be 2 has.

2. Estimation of above-ground biomass stocks

Estimation of above-ground biomass stocks will be estimated from monitoring plots, established at various scales:

1. National Forest Inventory and Soils has established a systematic network of about 25,000 permanent plots of 1,600 m2 each, in which all carbon polls are measured with IPCC methodology. A database of nationally developed biomass and volume equations will be used to convert the inventory data of trees to biomass and carbon. Equations are developed to convert inventory data on dead organic matter to biomass and carbon.
2. State Forest Inventories. Currently various states are developing their forest inventories at the state level, in coordination with the National Inventory (applying comparable methodologies and distribution of monitoring plots). These data will be used to reduce the level of uncertainties of the National Forest Inventory.
3. Community monitoring plots. Pilot projects are underway to train communities in monitoring their forest resources, with IPCC methodologies, particularly in areas where REDD activities may have a high potential.

3. **Level of tier to be used**

Most data will be collected at tier level 3, with a detailed national inventory of key C stocks, repeated measurements (5 years interval) and the use of modeling tools, such as CBM-CFS3 (currently being tested for Mexico through a bilateral agreement between Canada and Mexico).

The forest classification system has been developed by INEGI, a national institute in charge of maintaining and updating geographical and statistical data bases at the national, state and municipality level. Based on their land-use and land-cover classification system, about 20 different forest classes are identified and up to 4 degradation phases are differentiated in the maps. Maps are available at a scale of 1:250,000 for 1993, 2002, and 2007. These maps and classification system will be the basis for the satellite based monitoring system.

4. Estimation of CO_2 emissions from deforestation and forest degradation.

The estimation of CO_2 from deforestation will be based on the analysis of land use change (areas converted from forest land to other land uses) and the difference in carbon stocks of the forest land compared to the land use to which it is converted. It will be assumed that all carbon is lost during the conversion of forest land to non-forest land in the year the change occurs.

Uncertainty analysis will be used to identify the major sources, and if feasible, data collection will be adjusted to reduce this uncertainty. In all cases the conservativeness principle will be applied to estimate emission reductions from REDD initiatives

Complementary activities that will be developed, particularly in relation to the analysis of satellite imagery:

- Design and implement a standardized classification system of forests based on remote sensing information at a scale of 120 * 120 m, with ground based calibration from permanent monitoring plots (National Forest Inventory and others) to develop the initial forest cover map and to monitor the impact of REDD based programs.
- Design and implement a satellite-based monitoring system of early detection of “LU-change hot-spots” with Modis type imagery.
- Design and implement a national satellite-based monitoring system at multi-scale and applying multi-sensor data: sales 120*120 m (from Landsat), 250 * 250 m (MODIS), 500 * 500 m and 1000 * 1000 m, using imagery from NOAA, TERRA/AQUA, LANDSAT, ASTER, SPOT y CBERS, with temporal resolution of 1to 30 days.
- Design and implement a system to detect forest fires, forest pest outbreaks and impacts of extreme meteorological events at a scale of 120 * 120 m, with terrestrial calibration.
- Construct perturbation matrices associated to the various disturbance states of the forests and disturbance agents to generate the basis of a carbon dynamics model to be used to project emissions in the future.
- Design and implement an open documentation system of the monitoring system applying the international standards (Algorithm Theoretical Basis Document or ATBD).
- Design and implement a reporting system for REDD that is compatible with the national accounting system and international reporting to UNFCCC, FAO and that incorporates federal, state, municipality and non-governmental REDD activities.
- Design and implement a transparent reporting system of REDD to be used for external verification and to be available for national and international agents.

Expected Outcomes:

1. A multi-scaled monitoring system for REDD, based on satellite imagery and ground-based monitoring plots.
2. Activity data and emission factors to develop a reference scenario and monitoring system of REDD
3. National reporting system for REDD compatible with other national, state and project-based GHG-emissions reporting systems

Terms of reference to achieve outcomes:

1. Standardized national system of sampling plot and databases of emission factors and activity data.

1.1 To develop protocols for the standardized system of permanent and temporary sampling plots following a hierarchical and stratified scheme. All stocks and emission factors associated with carbon dynamics are considered, in addition to other greenhouse gases. The system is the result of previous sampling efforts, both national and local, to be combined in a way that is both harmonious and compatible with different interests and scales.

1.2 To develop a national database containing information related to carbon inventories and measurement of greenhouse gas emissions while meeting strict quality-control and uncertainty-quantification standards. This include emission factor for the various carbon components, definition of activity data.

Partners and organizations involved will include among others:

PMC (COLPOS-ECOSUR-UNAM)-INEGI-CONAFOR-SAGARPA

2. Standardized national multi-scaled and multi-sensor satellite-based monitoring system

2.1 To develop the primary standardized pre-process system of satellite imagery: calibration of radiometric degradation, quality control, georeferencing, orthorectification, atmospheric correction or standardization, topographic correction, sun-sensor geometry standardization, standardization per radiation components.

2.2 To develop a system for generic object classification (clouds, shades, water bodies, soil, vegetation cover, etc.) for all types of satellites.

2.3 To develop a standardized monitoring system, implementing a multi-scaled and multi-sensor integral system, to merge information of the various satellites.

2.4 To develop a ground-based, atmospheric, and generic context information system, designed to review estimates and quality control.

2.5 To develop a time-series type of model designed to detect the changes that break the growth patterns of vegetation due to disturbances and to implement operational procedures.

2.6 Create a basic functional classification of vegetation types based on growth-pattern parameters with the use of generalized spectral indexes, inside the areas marked by INEGI, reviewed by climatic effects with the use of a national climate grid assimilated into global circulation models.

2.7 Create an advanced functional classification of vegetation types based on biophysical parameters and their temporary patterns, inside the areas marked by INEGI (congruency analysis), reviewed by climatic effects with the use of a national climate grid assimilated into global circulation models.

2.8 To calibrate satellite estimates (spectral indexes or biophysical parameters) with the use of data from the national sampling-plots system and with the use of allometric relations between aerial foliage-biomass and the rest of stocks.

2.9 To develop a time-series type of model designed to detect the changes that break the growth patterns of vegetation due to disturbances associated with fires and extreme meteorological events, and to implement operation procedures.

2.10 To build perturbation matrices according to the size of the stocks and the change rates connected with the states associated with various states of the forests (degradation-deforestation), with the use of the calibrated estimates of remote sensing and the historical base of perturbation events.

2.11 To develop a monitoring, reporting, and verification system, including its documentation that can

be integrated on the Internet.

Partners and organizations involved will include among others:

COLPOS-ECOSUR-PMC-INEGI-SAGARPA-CONAFOR-CONABIO

Schedule and Sequencing of activities to establish the monitoring systems:

Activity	**1-2010**	**2-2010**	**1-2011**
Standardized national system of sampling plots and databases of emission factors and activity data	X	X	
• Develop protocols for the standardized system of permanent and temporary sampling plots	X		
• Develop a national database containing information related to carbon inventories and measurement of greenhouse gas emissions	X	X	X
Standardized national multi-scaled and multi-sensor satellite-based monitoring system	X	X	X
• Develop a standardized pre-processing system for satellite imagery	X	X	X
• Develop a system for generic object classification		X	X
• Implement a multi-scaled and multi-sensor integral system		X	X
• Develop a ground-based, atmospheric, and generic context information system	X	X	X
• Create a functional classification system of vegetation types	X	X	X
• Develop a time-series type of model designed to detect the changes that break the growth patterns of vegetation due to disturbances	X	X	
• Build perturbation matrices according to the size of the stocks and the change rates		X	X
• Develop an internet based monitoring, reporting, and verification system		X	X

Table 4: Summary of Monitoring Activities and Budget						
Main Activity	**Sub-Activity**	**Estimated Cost (in thousands)**				
		2010	**2011**	**2012**	**2013**	**Total**
Equipment	Computer systems	$950	$950	$	$	**$1,900**
	Installation costs	$75	$75	$	$	**$150**
Consultancy	Contracting consultancy	$190	$190	$	$	**$380**
	Technical assistance	$180	$180	$	$	**$370**
Travel and misc	Travel	$50	$50	$	$	**$100**
	Misc	$20	$20	$	$	**$40**
Availability of data sources on GHG emissions, land use, forest and carbon inventories and deforestation	A National Forest Inventory was developed between 2004 and 2007, about 22,000 conglomerates were measured; about 20 percent of all conglomerates are to be re-measured each year. In order to remeasure all 22000 conglomerates before 2013, the government needs help to measure 5% more than annualy planned.	$5,556 $1,250	$5,556 $1,250	$5,556 $1,250	$5,556 $1,250	**$ 22,224** **$ 5,000**
Hire 1 forest inventory and LUC monitoring specialis for implementing agency	Hire forest inventory information specialist	$20	$20	$20	$20	**$80**
	Total	**$8,291**	**$8,291**	**$6,826**	**$6,826**	**$30,234**
Government		$6,126	$6,126	$5,556	$5,556	**$23,364**
FCPF		**$525**	**$525**	**$0**	**$0**	**$1,050**
UN-REDD Programme (if applicable)		$390	$390	$20	$20	**$820**
Other Development Partner 1 (name)		$1,250	$1,250	$1,250	$1,250	**$5,000**

Component 5: Schedule and Budget

Guidelines

Please provide the following information based on the summary schedules and budgets from the various R-PRR components:

1. A schedule to fulfil the activities planned in this R-PP;
2. A budget summarizing the financial requirements to support this set of activities; and
3. Requested donor contributions to cover these financial requirements (highlighting your request from FCPF).

Please propose your detailed schedule, budget and allocation across donors in Table 5.

Schedule:

Component	Activity or theme	2010	2011
Consultation	Preparation and dissemination of the consultation	X	
	Understanding REDD as an option	X	
	Analyze REDD options and possible impacts	X	X
	Reference Emission Scenario and Monitoring System	X	X
	Financial mechanisms	X	X
	Dissemination of results of the consultations		X
REDD strategy	Assess the cost and impact of the various LU related projects of the forestry and non-forestry sectors on DD.	X	X
	Develop a spatially-explicit study on opportunity costs of the various non-forest LU options.	X	X
	Assess the capacity building requirements of both governmental institutions as local land-owners.	X	X
	Develop a deforestation and forest degradation risk-index, in close collaboration with component 7.	X	X
	Assess impact of the various forestry and non-forestry projects on biodiversity and poverty.	X	X
	Assess the possible risks and barriers of implementing REDD projects.	X	X

Component	Activity or theme	2010	2011
REDD implementation framework	Institutional, legal and political framework for REDD (including national reference emission scenario and MRV system, to be treated in components 7 and 8)	X	
	Establishing the rules of operation and governmental involvement, national registry of project activities, landowner involvement and financial mechanisms.	X	
	Definition of scale of activities, how to establish local RES and MRV within the national framework and how to implement in Mexico	X	X
	Tracking and register of REDD activities and MRV system	X	X
	Evaluate transaction costs of the various administrative options of REDD implementation	X	
	Emission reduction ownership and transfer rights.	X	
	Definition of the payment system (payment US/tC; US/ha, combinations?)	X	
Social and environmental impact assessment	Review of the proposals of REDD policies and definition of possible indicators that could be used to assess environmental and socio-economic impact of each option	X	
	Analyze available spatial-specific socio-economic and environmental databases	X	
	Identify the potential additional benefits of the REDD options at national, regional and local level	X	
	Assess trade-offs and risks involved with REDD options	X	X

Component	Activity or theme	2010	2011
Reference scenario	**1. Estimate forest conversion in time**		
	Obtain imagery	X	
	Adjustment of classification system	X	
	Development of classification algorithms	X	
	Classification of imagery and verification	X	X
	2. Development of Forest Risk Map		
	Identification of drivers	X	
	Analysis of past land cover change	X	X
	Modelling the process of change in relation to drivers	X	X
	Predicting course of change into the future (forest risk map)		X
	3. Analyze the impact of land-use programs		
	Obtain specially specific data on land-use support programs, particularly Progan, Procampo, Pro-Arbol	X	
	Select representative areas for analysis, based on program intensity and LUC dynamics	X	
	Modelling the change of areas with and without support	X	X
	Predict impact of programs on future DD		X
	4. Develop biomass density maps of forests		
	Calculate biomass densities of 2004-2007 inventory plots	X	
	Estimate biomass densities of LU classes (2007 image-interpretation)	X	
	Estimate biomass change within each class, based on 2009 inventory plots (20%)		X
	5. Develop a spatially-specific reference emission scenario	X	X
	6. Identify the key areas for future actions		
	Select criteria and indicators from stakeholder consultation	X	
	Develop a spatial index, based on selected indicators and relative weights	X	
	Identify key areas for future action	X	

Component	Activity or theme	2010	2011
Monitoring, reporting and verification system	Standardized national system of sampling plots and databases of emission factors and activity data	X	
	• Develop protocols for the standardized system of permanent and temporary sampling plots	X	
	• develop a national database containing information related to carbon inventories and measurement of greenhouse gas emissions	X	X
	Standardized national multi-scaled and multi-sensor satellite-based monitoring system	X	X
	• Develop a standardized pre-processing system for satellite imagery	X	X
	• Develop a system for generic object classification	X	X
	• Implement a multi-scaled and multi-sensor integral system	X	X
	• Develop a ground-based, atmospheric, and generic context information system	X	X
	• Create a functional classification system of vegetation types	X	X
	• Develop a time-series type of model designed to detect the changes that break the growth patterns of vegetation due to disturbances	X	
	• Build perturbation matrices according to the size of the stocks and the change rates	X	X
	• Develop an internet based monitoring, reporting, and verification system	X	X

Table 5: Schedule and Budget

	Activity	Estimated Cost (in thousands) 2010	2011	2012	2013	Total
1.a	National Readiness Management Arrangements	$93.0	$93.0	$0.0	$0.0	**$186.0**
1.b	Stakeholder Consultation and Participation	$108.0	$242.0	$0.0	$0.0	**$350.0**
2.a	Assessment of Land Use, Forest Policy and Governance	$1,561.0	$1,561.0	$1,561.0	$1,561.0	**$6,244.0**
2.b	REDD Strategy Options	$415.0	$255.0	$0.0	$0.0	**$670.0**
2.c	REDD Implementation Framework	$225.0	$170.0	$0.0	$0.0	**$395.0**
2.d	Social and Environmental Impacts	$175.0	$160.0	$0.0	$0.0	**$335.0**
3	Reference Scenario	$625.0	$550.0	$0.0	$0.0	**$1,175.0**
4	Design a Monitoring System	$8,291.0	$8,291.0	$6,826.0	$6,826.0	**$30,234.0**
	Total	**$11,493.0**	**$11,322.0**	**$8,387.0**	**$8,387.0**	**$39,589.0**
	Government	$7,342.0	$7,280.0	$6,327.0	$6,327.0	**$27,276.0**
	FCPF	$1,438.0	$1,398.0	$385.0	$385.0	**$3,606.0**
	UN-REDD Programme (if applicable)	$1,168.0	$1,107.0	$405.0	$405.0	**$3,085.0**
	Other Developm. Partner (Bilatertal agreement)	$1,545.0	$1,537.0	$1,270.0	$1,270.0	**$5,622.0**

Component 6: Design a Program Monitoring and Evaluation Framework

Rationale

The purpose of the Program Monitoring and Evaluation (M&E) framework is to encourage efficient and transparent management of Bank and country resources and to help a country keep track of its progress towards readiness and identify and address gaps, shortfalls, and program underperformance as they emerge. The Program M&E framework helps monitor, for example, the schedule of activities to be undertaken, the outputs and the final outcome using simple indicators and serves to provide real time feedback to the government and other stakeholders of how well the preparatory work towards REDD readiness is progressing.

Guidelines

This component is optional. The Program M&E framework can be drafted as a combination of 'process' indicators and 'product' indicators. The process indicators can be useful for internal monitoring at the country level to review whether or not the progress for the various activities/studies for the R-PP are on target, and to help address problems in a timely manner. Initially, process indicators may be more relevant. But as the country moves into readiness activities, product indicators can be established to measure the progress and outcomes of readiness activities against benchmarks established at the time of formulation.

Countries are advised to draft a simple Program M&E framework. This framework may include benchmarks and indicators such as: level of transparency in the R-PP development, inclusiveness of stakeholders, dissemination of information and products of R-PP, means of feedback, and adherence to guidelines for procurement. Locally based Program M&E can feed into the overall Program M&E framework at the national level.

If you choose to design a Program M&E framework, please provide the following information:

- **Summarize your proposal in the box below in one to three pages;**
- **Fill in the budget and funding request in Table 6 (the detailed budget and funding data go in Component 5);**
- **If necessary, provide any additional details or ToR as Annex 6.**

Note: This framework is distinct from any that will be developed or undertaken by the World Bank for FCPF program evaluation and supervision of Readiness Grant Agreements.

Table 6: Summary of Program M&E Activities and Budget						
Main Activity	**Sub-Activity**	**Estimated Cost (in thousands)**				
		2010	**2011**	**2012**	**2013**	**Total**
		$	$	$	$	**$**
		$	$	$	$	**$**
		$	$	$	$	**$**
		$	$	$	$	**$**
		$	$	$	$	**$**
		$	$	$	$	**$**
Total		**$**	**$**	**$**	**$**	**$**
Government		$	$	$	$	**$**
FCPF		**$**	**$**	**$**	**$**	**$**
UN-REDD Programme (if applicable)		$	$	$	$	**$**
Other Development Partner 1 (name)		$	$	$	$	**$**
Other Development Partner 2 (name)		$	$	$	$	**$**
Other Development Partner 3 (name)		$	$	$	$	**$**

Annexes (Optional)

Guidelines:

- **If you decide to annex Terms of Reference, plans, or other material important to describe how the R-PP would be organized or its studies performed, please include additional information in the annexes below;**
- **Delete any annex that is not used, but please maintain the numbering of the annexes (i.e., use the number for each Annex as shown below, even if you only have only a few annexes; do not renumber them);**
- **Update the Table of Contents to reflect only the annexes you include before finalizing the document.**

Annex 1b-2: Consultation and Participation Plan

Please present any relevant additional material not included in the body of the R-PP (Section 1b).

DESIGN OF THE NATIONAL CONSULTATION TO DEVELOP MECHANISMS TO REDUCE EMISSIONS FROM DEFORESTATION AND DEGRADATION (REDD) IN MEXICO

Elaborated by Judith Dominguez, David Madrigal (COLMEX) and edited by Ben H.J. de Jong (ECOSUR)

REDD OBJECTIVE

To reduce emissions from deforestation and forest degradation in Mexico. **Co-benefits:** poverty alleviation, generating forestry related capabilities in communities, improved forest governance, biodiversity conservation, and improved system for payment of environmental services.

GENERAL OBJECTIVE OF THE SURVEY

To identify the essential set of problems resulting from deforestation and forest degradation in Mexico, in order to ensure that decision making in the area of REDD implementation becomes more inclusive, transparent, and responsible, by means of a survey that makes it possible to ensure its long-term viability. The survey also aims to highlight the advantages and opportunities brought by this project to local communities and forestry stakeholders.

SPECIFIC OBJECTIVES OF THE SURVEY

1. To identify potential REDD activities.
1.1 To explore potential REDD mechanisms in the various forest areas.
1.2 To assess availability of knowledge on REDD mechanisms in the various forest areas.
1.3 To identify the strengths and weaknesses of current forest management in the various forest areas.
1.4 To identify inconsistencies and contradictions in the laws regulating forests (conservation and forestation laws, convergent or contradictory objectives of the various laws), in particular to potential REDD mechanisms.

2. To identify social stakeholders and groups that may be affected by REDD mechanisms
2.1 To identify the various institutional, community, commercial, and civil society stakeholders directly or indirectly involved in forest management in the different forest areas.
2.2 To learn about the current relations among the various stakeholders linked with forest management in the different forest areas.
2.3 To identify the stakeholders that may be affected by the implementation of REDD mechanisms in the different forest areas.

3. To identify social, environmental, and tenure constraints
3.1 To identify limitations and problems related to current forest management in the different forest areas.
3.2 To assess the potential of adaptation of REDD mechanisms to the regional and local reality.
3.3 To identify potential social conflict in the different forest areas in the country.

4. To combine social proposals and to give feedback on government proposals
4.1 To document those projects that are already being run in different forest areas in the country.
4.2 To document the REDD survey and implementation processes in Mexico.

5. To make the issue a social one
5.1 To encourage constant feedback during the REDD consultation.
5.2 To promote the issue and the progress made in the country during every phase.
5.3 To ensure that all stakeholders take part in REDD initiatives.
5.4 To encourage transparency and responsibility when making decisions on REDD initiatives in Mexico.

Introduction

The REDD consultation will be an continuous process to ensure the inclusion and participation of all stakeholders linked to forest management and conservation according to social, environmental and economic conditions in the different forest areas, applying a strategy that comprises successive approaches including stakeholder meetings, informative sessions, conferences with expert keynote speakers, workshops, dialogue groups, interviews, and consultation trials.

The process by means of which the REDD survey is being planned and implemented is the result of the collaboration among representatives of government agencies linked with forest management, representatives of civil society organizations, representatives of the academic sector, and representatives of international organizations interested in this issue.

The planning of the REDD survey is based on the premise that the opinion and the involvement of the society plays a vital role in ensuring the success of any government policy, in addition to the fact that society is increasingly involved in the decision-making process. The policy on forest resources gives the country the opportunity to encourage the sustainable management and development of forest resources in the states, without overlooking the role of forests as a common good. The approach entails laying down guidelines agreed by government agencies, institutions from the three government levels, forest inhabitants and owners, the indigenous communities, the private sector, and society's stakeholders; in other words, participatory planning[2] that begins with the consultation itself.

Following the work previously done by the National Forestry Commission (CONAFOR) in collaboration with the College of the Southern Border (Ecosur), government agencies and civil society organizations have been invited to develop a road map to prepare Mexico for REDD. This made it possible to bring together several government agencies, academics and members of civil society organizations linked with forest management. The invitation to participate in the preparation was always open and many stakeholders have joined in the preparation meetings. Table 1 shows the participants in these meetings:

Table 1: Participants during the meetings of the REDD task force

GOVERNMENT SECTOR	**ACADEMIC SECTOR**	**SOCIAL SECTOR**
National Forestry Commission (CONAFOR) National Ecology Institute (INE) Ministry of Agriculture, Fisheries, and Livestock (SAGARPA) Commission on Protected Natural Areas (CONANP) National Biodiversity Commission (Conabio) General Directorate of Climate Change Policy (*recently created)	College of the Southern Border (Ecosur) College of Mexico (Colmex) College of Postgraduates	WWF Pronatura Conservation International Greenpeace Mexican Civil Council for Sustainable Forestry (CCMSS) Reforestemos México Rainforest Alliance SAO A.C. FMCN Pronatura UNOFOC

CONAFOR's first proposal was the formation of a REDD Task Force as part of the Technical Advisory Board of the Environmental Services Project. This task force has not been formalized yet in institutional terms, but this will be one of the first steps towards conducting the consultation at the national

[2] Participatory planning is understood as the kind of planning that starts at the local level and is aimed at encouraging local development, since local society and authorities are the key players when it comes to decision making.

level. The task force will be a forum for reflection and analysis, for consensus building, for ongoing consultations with groups of experts, and to oversee the implementation of REDD in the future

This group, from now on called *REDD task force*, has been organizing monthly exploratory meetings since February 2008, convened by the National Forestry Commission (CONAFOR, aimed at determining the road map for the REDD initiative, with presentations of progress given by CONAFOR and Ecosur, particularly on technical issues (monitoring, reference scenario), which are the basis of the R-PP. The R-PP and its components have been presented during these meetings, particularly the following: *Survey, Monitoring and reference scenario,* and subgroups within the task force were established to elaborate each component. Each subgroup was given the task to draft documents for every component, and each task group appointed a coordinator. In the first instance, from the government (CONAFOR, National Ecology Institute, Semarnat) and from the academic sector (College of the Northern Border, College of Postgraduates and College of Mexico), the former representing those directly engaged in the formulation of forestry policies, while the latter represent the institutions that deal directly with forestry aspects and the social matters linked with forests.

ELEMENTS OF THE CONSULTATION PLAN

The REDD consultation plan consists of four phases:

1. The preparation and dissemination of the consultation.
2. Pilot consultation exercises to adjust methodologies.
3. The extension of the consultation model at a national level.
4. The dissemination of the results to obtain feedback

A participatory approach will be used during the consultation process, incorporating all major stakeholder groups and groups that may be potentially affected by REDD. The key elements of this participation process, planned in four phases, is the strategy with which the consultation intends to obtain information for the implementation of the REDD. The strategy consists of gradually approaching different stakeholder groups, including timber merchants, ranchers, producers, industrialists, farmers, civil society organizations, community leaders, indigenous communities, shepherds, women groups, youth groups, and other forest inhabitants through informational meetings and workshops, coordinated by the state and municipality institutions. Simultaneous use of some social research techniques is contemplated as part of the process, such as surveys and interviews, to complement the previously mentioned methodologies. Below there is a brief description of each phase.

1. Preparation and dissemination of the consultation

The first phase of the consultation comprises 2 activities: preparation of the consultation and its dissemination. Various meetings with the key actors will be carried out to define criteria and indicators for the consultation, what will be the decision-making procedure, what actors will be involved in the consultation process and how will the consultation be carried out (level: national, regional, state, municipality; methodologies: workshops, interviews, informative meetings; etc). Formal and informal information exchanges will be employed to disseminate the REDD concepts, the progress of the consultation, and its final results.

The objectives of phase 1 are:

a. To define a common consultation starting point of what REDD implies and its expected positive and negative impacts on the current forest administration.

b. To disseminate the opportunities offered by REDD in Mexico

c. To select the pilot consultation areas

d. To design and prepare the methodology to be applied in the pilot consultation.

The activities to be carried out during this phase are presented in a timetable on page 20.

Box 1. Expected results of this phase.

1. Establishment of a REDD task force in charge of designing the REDD strategy and the formalization of the CONAFOR as the responsible agent

2. Establishment of a consultation council with well-defined tasks and responsibilities.

3. Elaboration of a CONSULTATION PROPOSAL

4. Dissemination documents for the various stakeholder groups.

2. Pilot consultation exercises to adjust methodologies

The second phase comprises 2 activities: selection procedure of the pilot areas, based on facilities available to coordinate the activities, facilities available to communicate with the various actors, relative importance of the region in terms of forest governance schemes, based on the experience and historic knowledge about community forest management. Workshops in each of the selected pilot areas will be organized, applying group techniques, such as "Goal Oriented Project Planning" and "SWOT: Strengths, Weaknesses, Opportunities, Threats". In this phase the pilot consultation model will be tested in three distinct areas and if necessary adjustments to the consultation instruments will be applied. Two areas have already been identified by the REDD task force: Chiapas and Michoacán and Chiapas. The remaining three areas are still pending.

The identification of the areas in each region was executed taking two aspects in mind: a) facility for institutional coordination and communication with communities and other forest inhabitants in the region, b) communication and assistance from relevant local stakeholders related to forests in the region with experience and historical knowledge of what community forest management implies.

The estimated time necessary to complete this phase is four months, with at least one 2 day-long workshop in each region, applying the Goal Oriented Project Planning (GOPP) methodology.

The main objective of this phase is to apply and if necessary adjust the consultation model in terms of consultation instruments, workshop dynamics, and applicability of the consultation strategy.

3. The application of the consultation at a national level.

In this phase the consultation will be applied in the whole country, stratified in three regions: Southern Mexico (mainly tropical dry and humid forests); Central Mexico (mainly upland pine, pine-oak and oak forests); and Northern Mexico (upland forests, dry tropical forests, scrublands). The estimated time to be taken for the completion of this phase is six months, in which time the main area covered by the forests will be included in the consultation process.

The objectives of phase 3 are:

a. To apply the consultation instruments to all actor groups involved with forestry related activities and to agree upon procedures to involve the actors in future instrumentation of REDD.
b. To identify the actors involved in forestry related themes in each region.
c. To identify the interests of the forestry-related stakeholders
d. To identify opportunities and threats of forestry activities in each region
e. To obtain the information required to take decisions about the implementation of REDD in Mexico

4. The dissemination of the results to obtain feedback

In this phase the results of the consultation will be disseminated and feedback will be requested from all groups involved in the process. The information obtained during the consultation process will be analyzed and the final results will be published in the various media and other dissemination strategies defined during the consultation process, among others community radio systems, internet, and electronic message boxes.

The duration of this phase depends on the effectiveness of the communication mechanisms and feedback that contributes to decision-making for the implementation of the REDD initiative in the different forest regions and among the different stakeholders in forest management in Mexico.

The objectives of this phase are:

a. To analyze and report the information obtained during the consultation
b. To disseminate the results of the consultation to stimulate feedback from stakeholders
c. To design a mechanism to involve and communicate to the actors during the implementation of REDD, especially for indigenous and marginalized groups
d. To propose actions and activities for the REDD implementation in each region.

The consultation will be a continuous process during the REDD readiness phase with a mixture of the four phases executed simultaneously, as the various themes are progressing. The main subjects that will be incorporated in the consultation process are:

a. General understanding of REDD and its options within the Mexican LU policy.
b. Definition of REDD options and their expected impacts
c. Reference Emission Scenarios and Monitoring System (Scaling, priority areas)
d. Financial and crediting mechanisms

In the next sections, important elements of the consultation process will be discussed.

1. Development of the Consultation Plan and Organization of a National Workshop to Circulate information about REDD

As mentioned before, many meetings have been held by the *REDD task force*, and CONAFOR disseminated REDD in the *Séptima Expo Forestal (The Seventh Forest Expo)* that took place from the 24th to the 26th of September, 2009. It was a national event attended by diverse federative entities and forestry organizations, private initiatives and civil society in general.

During this event a REDD workshop was organized with invited international experts, in order to explain the advances in the design of strategies in the various countries. The necessary arrangements were made to ensure the presence of representatives of indigenous groups. This allowed information to be gathered on their impressions of the workshop. This workshop was considered as a first contact with indigenous groups, and the workshop was organized by CONAFOR, WWF and Colmex. This event marked the point of departure for the REDD consultation: Socialization of the topic on a national scale, and the presence of the media. Further on, regional dissemination forums have been contemplated involving ejidos and communities that live in the forests or are directly dependent on them, during the preparation phase, as well as during the phase of implementation of the consultation.

As proposed by the consultation group (CONAFOR-Ecosur-Colmex) the REDD task force will meet to define the paths, methodologies, and timetable of the consultation. The selection of pilot projects will also be one of the key points for discussion, and it will be carried out in consideration of the importance of selected regions in terms of: physical and environmental characteristics related to the forest areas located within them; the projects already functioning in these areas, and their potential for social conflict.

1. Workshops with local and national stakeholders.

The stakeholder groups that are identified for the consultation are presented in box 2.

Box 2. Identification of Stakeholder groups at each scale

Scale	Government	SCO	Experts	Consultants	Beneficiaries	Priority Groups	Financing Institutions
National	CONAFOR SEMARNAT CONANP PROFEPA CONABIO INE CDI SAGARPA SIAP SRA SEDESOL SCT SENER SE	WWF-México CCMSS Reforestemos México Rainforest Alliance SAO A.C. FMCN Fundación Raintrust A.C. Pronatura UNOFOC Ambio others	ECOSUR COLPOS INIFAP PMC Other academic groups	Dirección de Proyectos A.C. Sojita Mexicana SA/CV Ecobanca A.C.	National Organizations that represent rural communities: (CNC, UNORCA)	CNI RENAMUR	FIRA-Banco de México Fondo Forestal Mexicano
State	Environmental Organizations of the state governments						
Municipal	Municipal Governments						
Community					Communities that represent priority regions with marginalized and vulnerable groups	Indigenous people, women, and the youth	

3. Selection of consultation methods

The methods and instruments that could be considered for the consultation are presented in box 3.

Box 3: Proposed consultation Methods

Phase	Method	Objectives	participants
Preparation	Workshop	Definition of topics and priority actions	Consultation group and REDD task force
	Workshop	Definition of the criteria to evaluate the consultation and consultation starting point (Current forest management, governmental programs for LU)	Consultation group and REDD task force
	Workshop	Identification of stakeholders and potential affected groups and purpose.	Consultation group
	Consultancy	Elaboration of consultation documents (manual, guidelines, formats)	Colmex
	Forum with REDD experts	Positioning of REDD in the national context	Invited experts, REDD task force
	Workshop	Selection of consultation methodology for each subject, definition of stakeholder groups, preparationof consultation logistics	REDD task force
	Consultancy	Design of consultation, preparation ofworking documents (questionnaires, group dynamics, etc), schedule	Colmex
Pilot consultations	To be defined for each stakeholder group and topic.	Application of the consultation in three pilot areas, to adjust methodology.	Consultation group, identified stakeholder groups.
National consultation	To be defined for each stakeholder group and topic (workshops, assemblies, interviews, etc)	Application of the consultation at the national scale	Consultation group, identified stakeholders
Dissemination and feedback	Internet, news bulletins, press	Disseminate the results of the consultation to allow for feedback	Consultation group

4. Defining the topics of the consultation

This activity is important as it will define the scope and methodology of the consultation. The CONAFOR has already identified some topics that need consultation. Among the topics for consultation, the following have been identified: the current state of forests in every region of the country; previous and current policies to tackle illegal logging and forest degradation; causes of deforestation; identification of those responsible for illegal logging and forest degradation; degree of participation of potential beneficiaries in the design and implementation of REDD strategies; political, institutional regulation and other regulatory mechanisms; the rights for land-use and use of natural resources; forest governance; opportunity costs in the area of land-use; the interests of indigenous communities and other forest inhabitants; the environmental, economic and social consequences of REDD; risk mitigation; fair and efficient distribution of the benefits of REDD; community involvement in monitoring systems. Following, a series of questions are proposed that could guide the consultation process.

1. Activities apt for incorporation into the REDD payment scheme?

- How will they receive payment? By widening the coverage of the programs? The forest owners in an incentive scheme based on results?
- How will they be classified? Operation vs. capacity building? Production vs. conservation?
- How will the system for classifying priority areas work? Through pre-selected criteria, increasing financing or providing stakeholders exclusively with resources. How to avoid the transfer of deforestation to other areas as a consequence of the programs?

2. Reference Scenario

- Are social factors included in the reference scenario or in defining priority areas?
- Should priorities be organized according to type of property?
- Is it viable to incorporate amounts of carbon in soils in the calculations? How?

3. Financing

- What financial alternatives are available and do they depend on established criteria?

4. ***Strengths and weaknesses of the current governmental programs***

- Access to the programs
- Impact on deforestation and forest degradation
- Creation of social and economic capital

5. Adjustment of legal and institutional framework for the implementation of REDD

- Does the implementation of REDD require adjustments of laws and regulations?
- Does the implementation of REDD require institutional changes?

5. Identification of groups that potentially could be affected by REDD.

The most important stakeholders at the national level are identified and are already participating in or invited to the REDD task force. Stakeholders on a regional, state, and local level remain to be identified. Considered of particular importance are: civil society organizations; indigenous communities, who have a particular vision of, and relationship with the forests; and vulnerable groups, women in particular (who due to masculine migration to urban areas and abroad, have inadvertently been placed at the forefront of forest management although they are not the legal owner of the forest). Finally, other important stakeholder groups are the youth (recent social surveys have shown that they are not interested in working in the forests, which could present a problem for the future implementation of REDD), farmers and ranchers, whose daily activities could be at risk if they are not allowed to use the forest for cattle grazing within a REDD activity)

The following questions could help to identify and analyze the stakeholders that could be affected by the REDD strategy:

- In what way have illegal logging and forest degradation affected the communities and indigenous population who depend on the forest?
- ¿How can vulnerable groups be included in the proposed REDD strategy?
- ¿What is the legal situation of land tenure in the forests?

- ¿Have threats been identified to rights to land tenure and land leasing?
- How can equity in REDD schemes be guaranteed?
- What interested stakeholders could enter into political conflict with the project goals?
- What is the relationship among the identified stakeholders? Who has power over whom? Who is dependent on whom?
- Who has control over the resources?
- Who has control over information?
- ¿Could the benefits of REDD activities be monopolized by non-target land owners? What kind of distortion of activities could be expected as a consequence of non-target land owners influence? How can this be overcome?

To answer these previous questions, the identification methods that have been considered, to pinpoint stakeholders and their relation to forest management in Mexico, are detailed in the next section and will be applied during forums and pilot interviews, and later in the consultation. For the moment, a diagnosis of the situation of communities and other forest inhabitants in the country can be found in the document named component1 “Forest Governance and Land Use.”

6. Methodology to identify stakeholder groups

During the pilot exercises and extensive application of the consultation on a national scale, part of the research consists of elaborating a social diagnosis of forest management in the country from a local perspective. For this, a methodology has been proposed that is supported by the supposition that social reality can be seen as if it were basically conformed of interactions between stakeholders and social institutions. The collection of links and social relations form networks, depending on where the different stakeholders find themselves in said network, defines their values, beliefs and behavior.

The mapping of stakeholders looks to not only create a list of the different stakeholders that would participate in the REDD initiative in Mexico, but also to gather information on the actions, interests in the initiative and the obstacles, limiting factors and opportunities for their participation.

The mapping of the stakeholders should be considered as a first step towards bringing civil society together in participative actions (meetings, consultations, et cetera) In this way it will not only assuure the number, but also the even representation of people and entities (associations, foundations, base organizations, governmental institutions, et cetera) that have been invited to participate.

The use of stakeholder mapping, also called “sociograms” helps to demonstrate the social reality in which we plan to intervene, through the understanding of its complexity, and the design of intervention strategies that are not only based on common sense or the single opinion of a qualified informant. Stakeholder mapping allows us to become familiar with alliances, conflicts, and authorized spokes-people, and consequently to select the best stakeholders to approach and at what time.

Step 1. Initial Proposal for the Classification of Stakeholders

The intervention proposals must define, at the start what institutions, and organized groups or individuals will form part of the proposal, in order to establish with them what their level of participation will be.

The stakeholders involved are classified by groups according to the proposal laid out in the previous information box in order to recognize the most important stakeholders that are included in the proposal.

In the case of the consultation plan, the following classification of stakeholders has been proposed:

1. Public institutions, made up of entities from local and/or central government.

2. Private institutions, comprised of business of private stakeholders that can contribute and/or participate in the project.

3. Non-Profit Organizations,comprised of civil society organizations that worked in the areas explored.

4. Social organizations, made up of community associations, unions, and other local entities that are specifically linked to the historic background of the region and to forest management in each of these regions.

5. International organizations and partners that serve a function as assessors, consultants and financing bodies.

Step 2. Identification of the functions and roles of each stakeholder

The objective is to identify the main functions of the stakeholders involved in the intervention proposals; as well as to identify possible actions to be taken that could shape a network of inter-institutional and intercommunity alliances related to the current system of forest management in each region of the country. This identification process will be carried out within the diverse possible scenarios that surface from the proposal of the CONAFOR. It is considered that stakeholders may change their position in relation to the REDD initiative according to how aligned it is with their particular interests.

Step 3. Stakeholder Analysis

The objective is to carry out the analysis of the stakeholders, in the two proposed categories below:

a) Predominant relationships

b) Level of power

With these categories, the aim is to carry out a qualitative analysis of the different stakeholders in terms of participative processes.

The predominant relationships are defined as relationships of affinity (mutual confidence) against the opposite kind (relationships of conflict), always in consideration of the objectives or the relevant intervention proposals. Three conclusions are considered in this analysis:

-**In favor:** Relationships of affinity and mutual collaboration are predominant.

- Indecisive/indifferent: Relationships of affinity are predominant but there are a large number of cases of negative relationships.

- **Against:** Relationships of conflict are predominant.

The hierarchy of power is defined as the capacity of the stakeholder to limit or facilitate the actions taken within the intervention proposal. The following levels of power are considered:

-**High**: A strong influence over other stakeholders.

-**Medium**: A moderate accepted influence over other stakeholders.

-**Low**: No influence over other stakeholders.

It may help to also use the following template:

Box 4. Methodology for the Analysis of Stakeholders

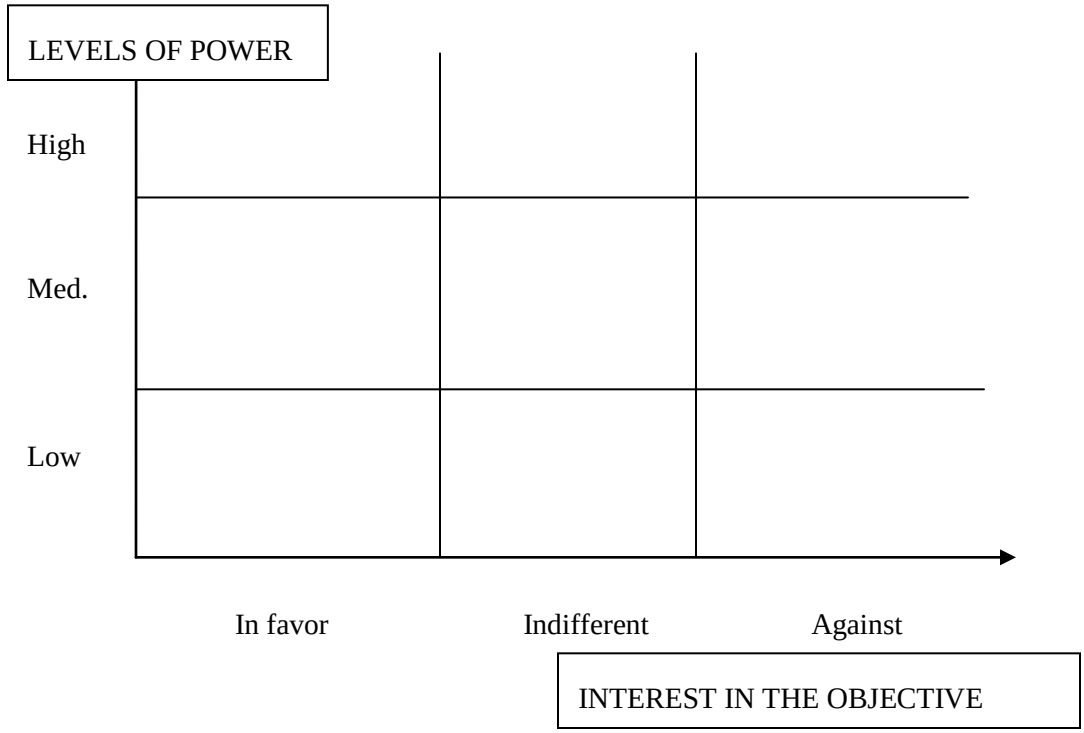
GROUPS OF SOCIAL ACTORS	STAKEHOLDER	ROLE IN THE PROJECT	PREDOMINANT RELATIONSHIPS	HIERARCHY OF POWER
Classification of the different social actors in a specific area	A group of people with the same interests that participate in a project or proposal NAME	Functions that every stakeholder carries out and the objectives of their actions	Defined as relationships of affinity (mutual confidence) against the opposite (relationships of conflict) 1. IN FAVOR 2. INDIFFERENT 3. AGAINST	Capacity of the stakeholder to limit or facilitate action. 1. HIGH 2. MEDIUM 3. LOW

Step 4. Elaboration of the stakeholder map template

Create a two-sided table in which every row (vertical axis) is determined by the three levels of power that every stakeholder may possess (high, medium, large) and every column (horizontal axis) is identified by the position of each stakeholder in relation to the objective o intervention proposal (in favour, indifferent, negative).

Through discussion with participants, it is possible to procede to the positioning of every identified stakeholder in the table in accordance with their importance and level of power. In this way, a stakeholder map can be constructed (Box 7).

Box 7. Mapping of stakeholders according to their position and level of influence



Step 5. Identification of Social Relationships

The goal is to identify and analyze the type of relationship that can exist between the different identified stakeholders, for example: relationships of strong coordination and teamwork, a weak relationship with little or no coordination, and relationships of conflict. The following levels of social relationships are proposed:

1. Relationships of strong collaboration and coordination

2. Weak relationships

3. Relationships of conflict

Step 6. Recognition of Existing Social Networks

The identification of the existing networks and the actions that should be taken in respect to this. .For example, social networks can be identified that coordinate common activities for risk management in their communities, as well as groups that have relationships in need of strengthening and those that have relationships of conflict. From this, strategies can be proposed to work with consolidated networks and to strengthen relationships between groups that share weak relationships.

Leadership building and reinforcement is required, as well as the establishment of commitment and continuous learning about social issues based on concrete facts and evidence that can be observed in the forests of Mexico.

The results of the consultation will depend on the attitude of the stakeholders involved, as well as on the political willingness corresponding governments and their decisions taken that give representation, legitimacy and credibility to the quality of participation by stakeholders.

A multi-disciplinary team is needed, under the coordination of the Colegio de México, for the analysis of key stakeholders from the relevant localities and authorities, and among civil servants and facilitators etcetera. The establishment of a space is being considered that is sufficient for the adequate analysis of the results of the consultation. Although this process will be completed in the first six months, the continuous feedback for the strategy is projected to be collected through more sporadic consultations on pertinent topics with key stakeholders.

Box 10. Relevance of Topics according to stakeholder group

	REDD Activities	Reference Scenario	Financing	Legal and Institutional Framework
Government	XXX	XXX	X	X
SCO	X	X	XX	X
Experts	XX	XXX	X	X
Consultants	XX		XXX	X
Beneficiaries	X		XX	
Priority groups	X		XX	
Financing institutions	XX		XXX	

7. The consultation with vulnerable groups and the indigenous population

Great importance will be given to the incorporation of people that are familiarized with certain vulnerable groups, such as indigenous people and women, and that have worked many years with these groups. This will greatly facilitate the consultation and contact process. In this sense, work will be carried out in conjunction with the CONAFOR, which works with indigenous communities and in collaboration with the Comisión de Derechos Indígenas (Indigenous Rights Commission) that already have established infrastructure and networks. The CONAFOR also works with the Instituto Nacional de las Mujeres,(National Womens Institute), which develops projects with these groups. .The areas of the SAGARPA that directly assign its resources to agricultural activity constitute a cornerstone of consultation for the infrastructure, relationships, and networks that it has already set up on a regional, local, and community level.

An adequate understanding of the local values and cultures will contribute to the defining of priorities, goals, and the improvement of critical indicators to generate wide-ranging support and acceptance of the REDD mechanism proposed in the strategy. For these reasons, the following premises will be considered:

- Is the personnel that will analyze the interviews sufficiently qualified and familiarized with the communities to analyze and interpret the results of the consultation?

- Are the opinions of the indigenous population, forest owners, and vulnerable groups being adequately recorded?

- Is it possible to incorporate their vision?
- How will the analysis of decision-taking and the planning process provide feedback?

8. Identification and clarification of interests that could be potentially affected and what are the possible mechanisms to compensate for this.

• The consultation process should identify these specific negative affects and, through proposals from stakeholders, create mechanisms to solve and compensate for them. These mechanisms could consist of systems of conflict management at a local and national level. This is one of the main contributions of the consultation.

9. The start of the consultation

The consultations will be carried out with relevant stakeholders at different levels and will include:

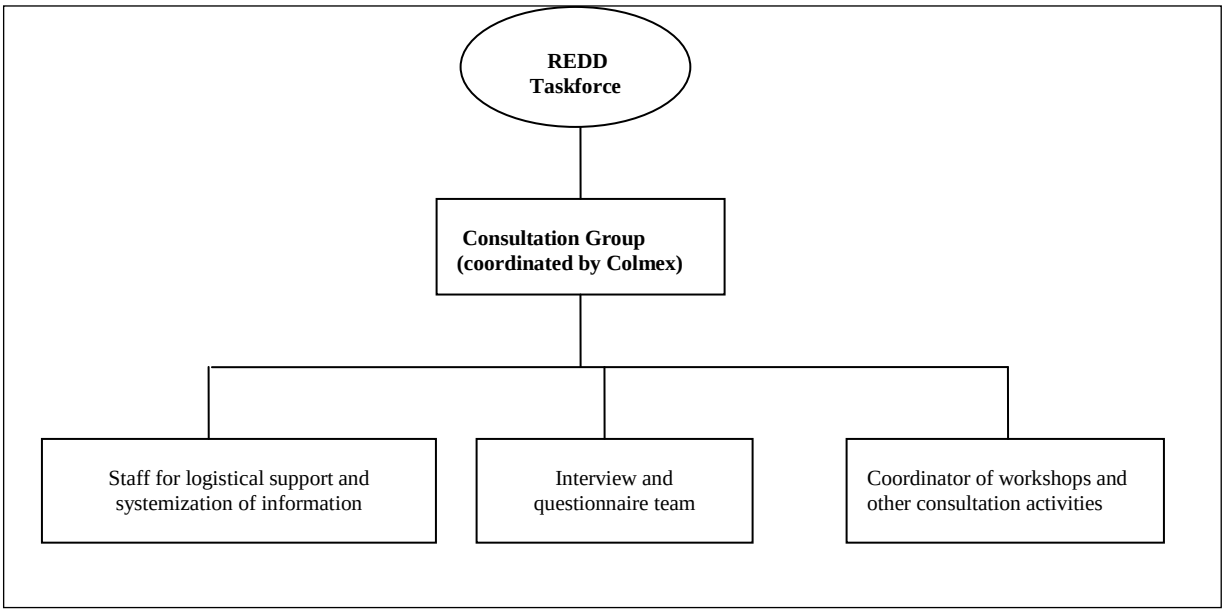
- Consultations with actors in the national, state and local governments. .

- Separate consultations will be carried out with social organizations, ejidos and communities that live in the forests, assuring geographical and regional balance.

- Consultations with dominant organizations in the private sector.

The work strategies and research techniques used during the four phases that we have considered as the REDD consultation plan, have the objective of driving for a wider participation of related stakeholders in forest management in Mexico. In this way it can be these very stakeholders that propose the mechanisms, strategies, their viability, and the obstacles to overcome on the way to implementing REDD in the different regions of the national territory. The work team that will carry out the presented consultation plan is organized in the following hierarchical structure:

Box 5. Consultation Coordination



The data obtained from the consultation will be analyzed and systemized to document the process. In this way, there will be constant feedback on the consultation. The web page will be one of the means used but information will also be circulated in the work meetings of the REDD group to correct, in any given case, the application of the proposed process in its beginnings.

10. Communication and dissemination of the results of the consultation

The objective is that the results be reported in a timely and adequate fashion. That is to say, for certain social groups, *ad hoc* mechanisms should be implemented. If possible for example, in the case of indigenous groups, support will be obtained from the CDI (The national commission for the development of indigenous peoples) to translate basic information pamphlets on REDD.

The following means of communication are contemplated:

- Printed materials for all social actors.
- Exhibitions, congresses that take place at a national and regional level, to make the best use of them to disseminate the REDD mechanism and the provisional results that emerge from the consultation.
- Electronic mediums, which could be the webpage of the WWF or the official webpage of the CONAFOR.
- Informal and informal informational meetings, particularly at a state and local level, to demonstrate the results of the consultations that were carried out in these places.
- Community radio stations, especially indigenous communities and rural localities.

- Other local means of communication, that have already been worked on over time with the CDI.

Box 6. Consultation Dissemination Channels

Government	SCO	Experts	Consultants	Beneficiaries	Financing Organizations
Reports Leaflets Periodical updates	Dissemination Workshops Reports Specific invitations Pamphlets Periodical updates	Specific workshops Periodical updates Reports	Dissemination workshops	Dissemination workshops Radio Television Pamphlets REDD dissemination manual	Reports Periodical updates Pamphlets
REDD website Portal					

11. Feedback on the REDD strategy and dissemination of the final results.

The results of the diverse consultations will be disseminated and newly discussed in a National Forum at the end of the process. This will help establish what has to be corrected during the strategy implementation, what the legislative gaps are, issues related to forest management, in order to pass this information to the corresponding offices and entities. With this information, the intention is to advocate in their policies. This forum will have the following objectives:

a) To present the government consultation and the proposed participation plan, including that mentioned in steps three to seven.

b) To disseminate the results of all the consultations.

c) To identify the key questions posed during the consultations and how to respond to them.

d) To describe how the results of the consultation process will be incorporated in the policies and programs of REDD.

The results of all the consultations could be disseminated through the existing communication channels, including the government website, periodical written updates, radio stations, through the national and local press, as well as through communication channels that already exist at a local level.

Box 7. Expected goals of the REDD strategy

Goals to be included in the proposal

- Increase of social capital
- Establishment of production associations
- Push for democracy in decision-making and equity in the distribution of benefits
- Improvement in forest governance

Annex 2a: Quick Assessment Report

FOREST GOVERNANCE AND LAND USE

1. INTRODUCTION

The relationship of Mexican indigenous peoples with the forests is very diverse. This relationship is defined by cultural, historical, geographical, social, economic, and political factors. We cannot generalize in terms of a single pattern of behavior. The systems of community organization are kept solid or they weaken according to internal and external factors.

In an attempt to systemize this diversity, we can describe three predominant elements of behavior in Mexico. These are associated with each other at different times and under different circumstances: Community experiences of silvicultural sustainable management, inadequate forest management and the actions of communities as “Guardians of the forests”.

The governance of indigenous communities is centered in the power of the Community Assemblies and of consensus. The management of these concepts can be seen in daily life as actions pass through strict traditional channels. This can be seen in the case of the mere support needed to take decisions in small groups, as well as in the process of elevation of these small groups to the rank of valid and legal representatives, within the framework of the communities that can convert them into “sujetos de derecho” (rightful subjects).

The regulation over land and forests in the 20th century was marked by two visions: a productivist vision derived from the Mexican Constitution of 1917 and, later, a conservationist vision through declaration of different areas of land as protected natural areas in the 40s. These visions have survived to recent times. The absence of forestry policies lead to the prevalence of a productivist vision that did not consider the environmental impact of activities in the forests. It was not until the 80s that the other functions of forestland were considered, and only recently have the situation and relation of indigenous populations with the forests been contemplated.

2. COMMUNITY EXPERIENCE

In a report by the World Bank of May 2007, it was indicated that the forests in Mexico were the location for successful experiences in community economy. Managed in the most part by members of the indigenous communities, the forests have become an important vehicle for poverty reduction, environmental conservation and a decrease in violence.

In accordance with data from the INEGI, silviculture generates economic activity worth 3,763,000 Mexican pesos, a quantity that only represents 0.22% of the GDP. Nevertheless, the areas of forest are located in some of the poorest regions in the country.

‘’The community forest enterprises constitute a notable contribution to conservation and development strategies for Mexico: an innovative social invention that the rest of the world is starting to discover”, the report indicates. The community enterprises are profitable, independently of whether they process timber or not, since they do not have a negative impact on biodiversity.

Nevertheless, the majority of the forests in the country continue to be subject to silvicultural use of land that damage the environment.

As in the case of other tropical countries, Mexican forests are inhabited. Base don data from the INEGI, it is estimated that the population of forest communities is of 11-15 million inhabitants (which fluctuates due to temporary migration). Some 8,240 forest communities exist, of which 28% speak indigenous languages. The forest regions are among the most marginalized and impoverished in Mexico. More than 50% of its population live in conditions of extreme poverty. This was published in the Revista Mexicana de Comercio Exterior (The Mexican foreign trade magazine) in December of 1999).

3. THE CURRENT SITUATION OF THE FOREST SURFACE IN MEXICO

Analysis of the change in land use.

In the last decades, the forests coverage in the country has gradually receded from 68.86 million hectares in 1993 to approximately 66.46 million hectares in 2007, including all types of secondary vegetation (INEGI, series 2, 3 y 4). On the other hand, the scrublands diminished only slightly in the same period of time from 20.76 million hectares in 1993 to 20.15 million hectares in 2007. The process of degradation was especially notable in the different types of forestland with an increase of 30.89 million hectares in 1993 to 33.43 million hectares in 2007. The net annual deforestation (rate of deforestation against the rate of recuperation) was 203,103 hectares 1993 and 1998, and 160,667 between 2002 and 2007, with an average between 1993 and 2007 of 185,729 hectares (Table 1). Also, there was an increase in the coverage of degraded forestland of 341, 639 hectares/year between 1993 and 2002 and of 246,830 hectares/year between 2002 y 2007, indicating that the process of degradation is faster that the process of deforestation. Applying a more detailed analysis of the processes of deforestation and degradation between and 2002 and 2007, a large part of the deforestation is happening through the process of degradation, whole direct deforestation of primary forests is much less (Figure 1). The previous data implies that the process of degradation of forestland in Mexico is very important and acts very much as a launching point for deforestation. No detailed studies have been carried out on the causes of degradation, which is information that is vital to the elaboration of the reference scenario.

Table 1. Total surface area of forests, and scrublands in 1993, 2002 and 2007, and annual rates of surface-area change and in the percentage of forestland and scrubland, totalled in the periods of 1993, 2002 and 2007. Information derived from the information definitions of forestland and scrubland provided by the CONAFOR for the reports to the FAO (Food and Agriculture Organization of the UN) and taken from maps of the INEGI series 2, 3 and 4.

Superficies (ha)

	1993	2002	2007
Bosque	68,859,668	67,192,776	66,463,461
Matorral	20,758,996	20,023,174	20,149,336
Bosque+Mat	89,618,664	87,215,950	86,612,796
Bosque-Degr	30,889,714	32,720,228	33,430,291
Mat-Degr	2,475,056	2,042,425	2,356,462
Bosque+Mat-Degr	33,364,770	34,762,654	35,786,753

Tasas de cambio (ha/año)

	1993-2002	2002-2007	1993-2007
Bosque	-203,103	-160,667	-185,729
Matorral	-83,980	-33,979	-41,196
Bosque+Mat	-287,083	-194,646	-226,925
Bosque-Degr	341,639	246,830	302,272
Mat-Degr	-10,120	8,932	-795
Bosque+Mat-Degr	331,518	255,762	301,477

Tasas de disminución (%/año)

	1993-2002	2002-2007	1993-2007
Bosque	0.30%	0.24%	0.28%
Matorral	0.42%	0.17%	0.21%
Bosque+Mat	0.33%	0.22%	0.26%

Bosque-Degr = Forest Degradation

Mat-Degr = Scrubland Degradation

Matorral =scrubland

Superficie (ha) = Surface area (hectares)

Tasas de cambio (ha/año) = Rates of change (hectares per year)

Tasas de disminución (%/año) = Degradation Rates (% per year)

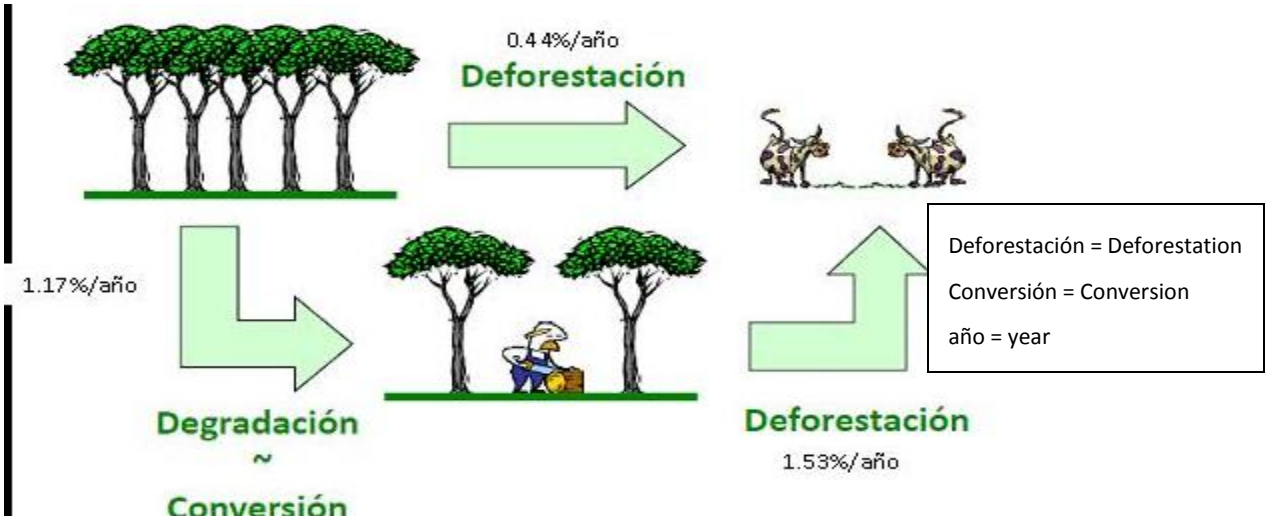


Figure 1. Processes of deforestation and forest degradation and annual rates between 2002 and 2007.

In figure 2, the distribution of primary and secondary forests and scrublands is shown in 1993, 2002, and 2007. According to the definition of forest, adopted by the REDD workgroup on March 2, 2009, the eligible areas for REDD are colored green and red in the map from 2007 (total 86.6 million hectares).
In terms of the impact of forest land-tenure in the dynamic of changes in land use in forests and scrublands, a preliminary analysis shows that, form the forestland that was present in 2002, 50.7% was social property and 27.6% was private property. The remaining quantity that was not registered as property is located in national territories. The net and gross rates of deforestation during 1993 and 2002 are presented in Table 2. It can be observed that net and gross deforestation rates (in % per year) on private property were higher than levels at a local level, while net deforestation rates (in % per year) in forestland on social property were higher and the gross rate was lower than national rates. It remains to be mentioned that a more detailed study is required of the causes for these differences.

Table 2. Net and gross deforestation rates between 1993 and 2002 in different types of forests at a national level (total) in forestland on social property (Proc) and private property (Priv) in hectares per year and in % per year.

Deforestation	Total		Proc.		Priv.	
Net	287,083 ha	0.32%	118,145 ha	0.36%	69,628 ha	0.38%
Gross	675,493 ha	0.75%	225,591 ha	0.68%	146,602 ha	0.80%

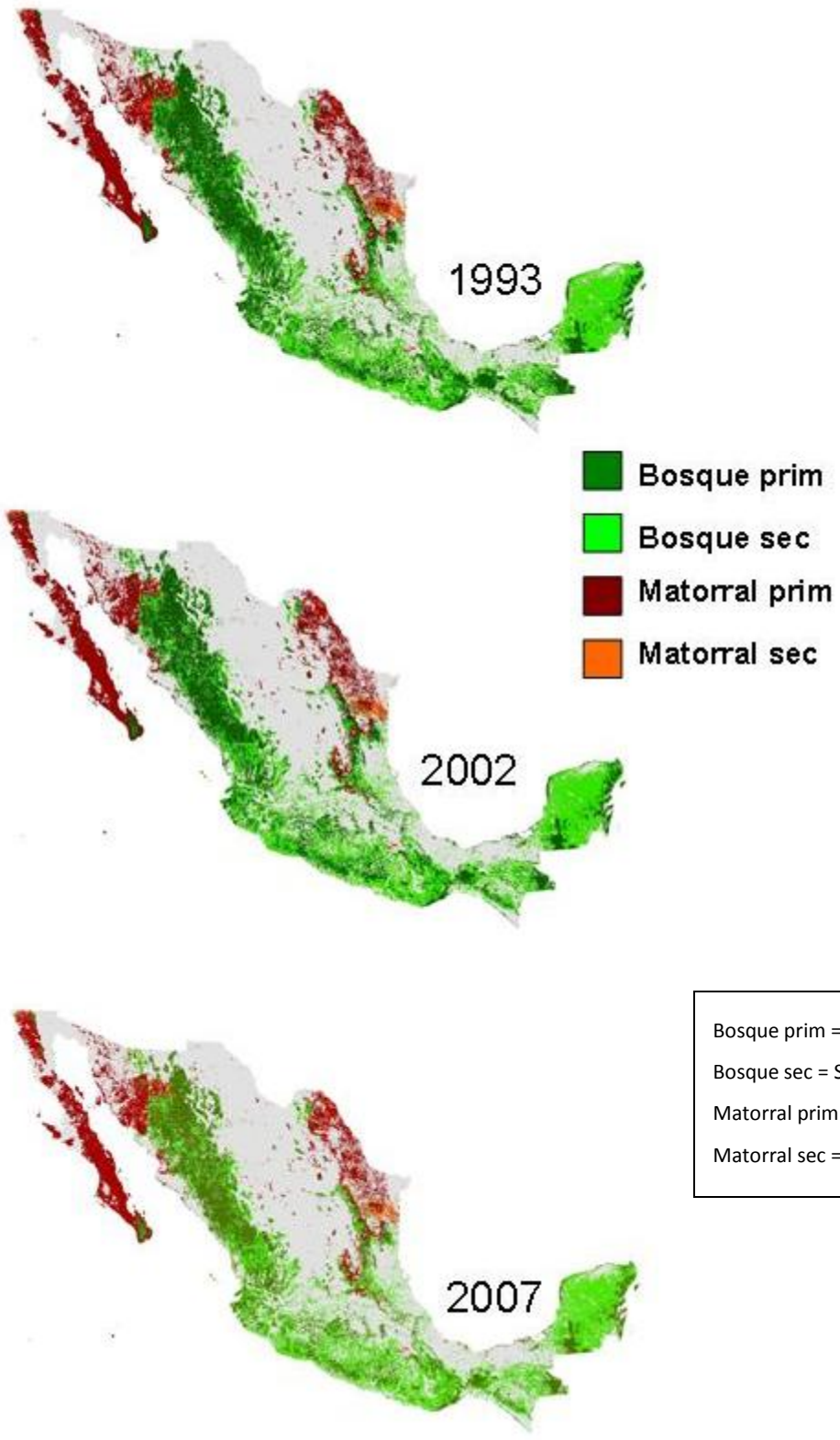


Figure 2. Areas covered by primary and secondary forestland and scrubland in 1993, 2002 y 2007, according to information from the INEGI series 2, series 3 and series 4.

Deforestation is cause by the change in land use for agricultural and urban use; by forest fires, illegal logging, special permits for alternative use (like the case of the CFE or federal commission of electricity);

and to a lesser extent by natural disasters INE 2005, (figure 3). The forest degradation is basically driven by the extraction of timber and firewood, by R-T-Q, and by illegal logging. In Figure 1 it can be appreciated that the process of deforestation is majorly driven by the process of degradation, and to a lesser extent by direct deforestation of masses of little-disturbed forest.

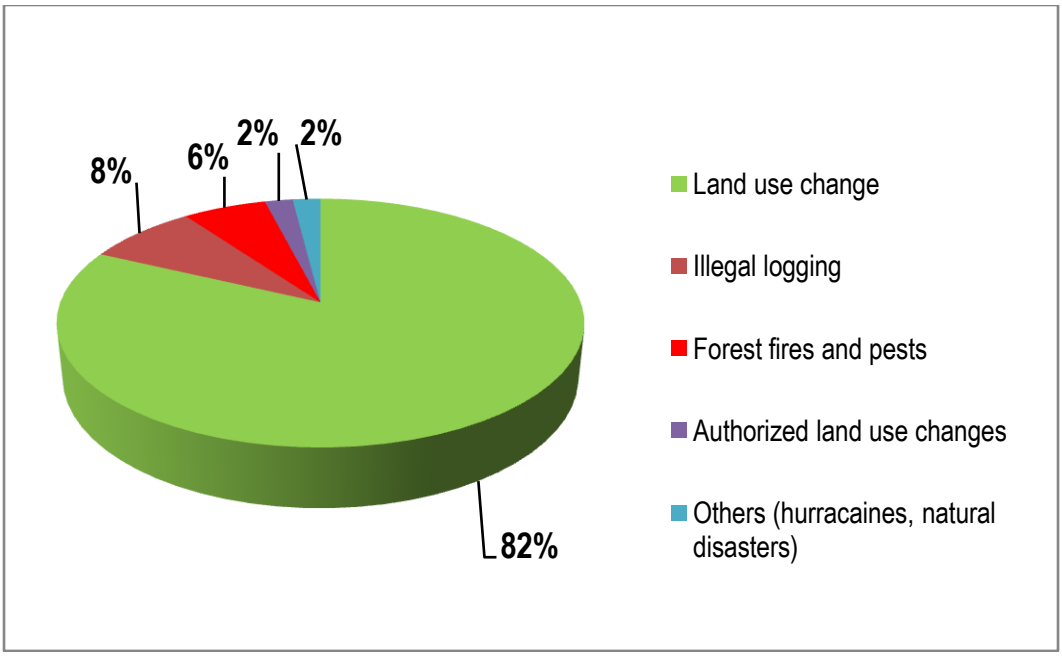


Figure 3. Importance of different causes of deforestation (INE, 2005)

3.3 Deforestation Projections for the Future

Making projections for the future rate of deforestation can start from two different historical baselines. Firstly only the gross rate of deforestation can be taken into account, without considering the forest-recuperation rate (independently of whether it is recuperated naturally or artificially) or the net deforestation rate (taking into consideration forest-recuperation rates). Lastly, the deforestation rate can be calculated in hectares or in a percentage calculated by the formula:

$$1-(1-(S_i-S_f)/S_i)^{1/n} \qquad 1$$

"S_i" is the surface area at the start of a year, "S_f" is the surface area at the end of a year, and "n" is the number of years between "i" and "f".

In Figure 4, deforestation projections are shown to 2017, using as a basis for the projection the net and gross deforestation rates for the three analyzed periods, taking into consideration the rate of hectares per year.

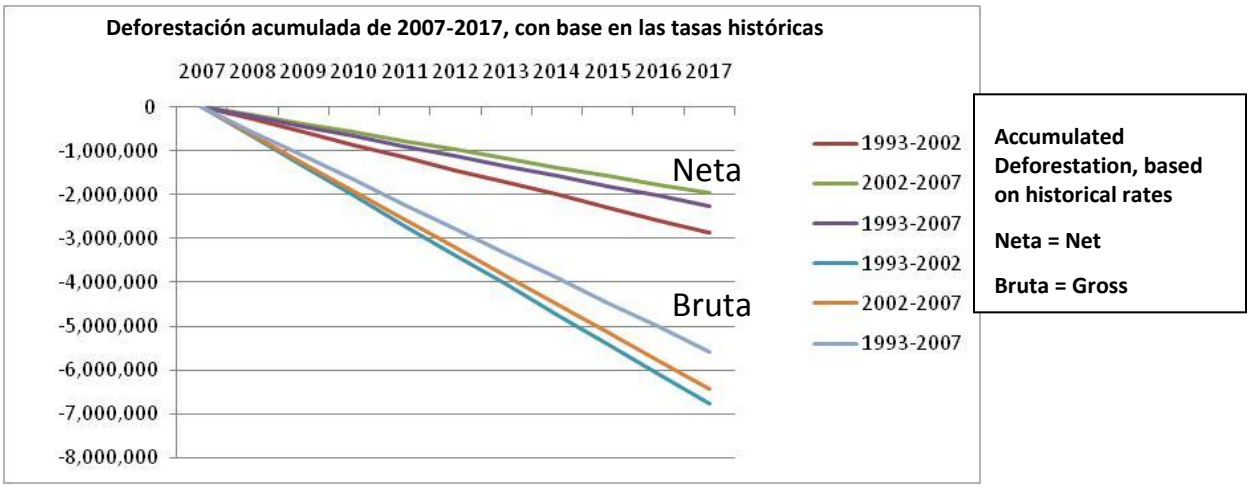


Figure 4. Estimations of accumulated deforestation from 2007 to 2017, using historical net and gross rates from 1993 to 2002, from 2002 to 2007, and from 1993 to 2007 (based on information from the INEGI s2, s3 y s4)

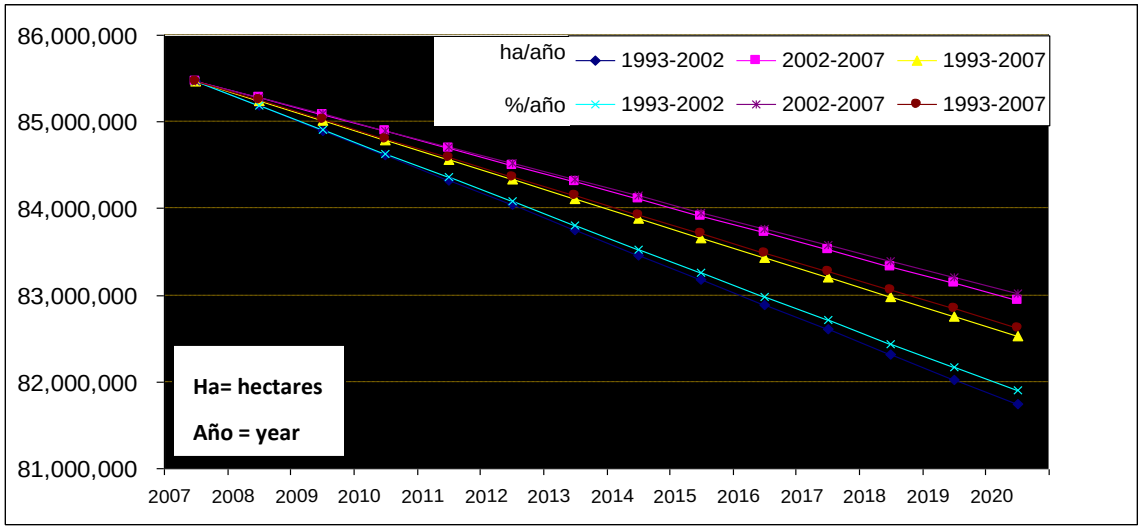


Figure 5. Projections for forestland and scrubland coverage to 2020, using annual change rates in hectares and percentages observed between 1993 and 2002, between 2002 and 2007, and between 1993 and 2007.

In Figure 5 the difference is shown in the application of rates in hectares per year and percentages per year for the cases of net deforestation. It remains to say that the difference between the annual rates in hectares and percentage increases as both rates increase and if we make projections for the distant future. Based on the preliminary analysis, it is important to take a decision on which rates are going to be used (in this case it refers to the international discussion on Reference Scenarios (RS) and Reference Emission Scenarios (RES).

According to national forest inventory, Mexico has lost 409.2 Mton CO_2e in the last 14 years (1993-2007) within the forest area. If we include the arid and semi-arid zones, then the figure increases to 521 Mton CO_2e. Those figures will mean a potential annual mitigation rate of 29.2 Mton CO_2e from forests and 37 Mton CO_2e including forests and shrubs (all 136 M ha). See the following table to identify carbon losses from 1993 to 2007.

Loss of forest carbon between 1993 and 2007

ECOSISTEMA	FORMACION	CARBONO TOTAL (Ton)		DIFERENCIA EN EL PERIODO
		1993	2007	
BOSQUES	CONIFERAS	303,172,964.38	303,874,832.39	-701,868.02
	CONIFERAS Y LATIFOLIADAS	766,404,746.11	734,265,059.07	32,139,687.04
	LATIFOLIADAS	338,428,071.60	326,563,986.21	11,864,085.39
SELVAS	SELVAS ALTAS Y MEDIANAS	612,499,990.06	564,783,590.63	47,716,399.43
	SELVAS BAJAS	348,880,997.39	329,321,691.37	19,559,306.02
	OTRAS ASOCIACIONES	29,594,898.05	28,557,443.03	1,037,455.02
SUBTOTAL ARBOLADO		**2,398,981,667.59**	**2,287,366,602.71**	**111,615,064.88**
MATORRAL XEROFILO	ZONAS SEMIARIDAS	237,379,928.24	230,476,301.23	6,903,627.01
	ZONAS ARIDAS	742,266,080.81	720,730,587.76	21,535,493.05
OTRAS AREAS FORESTALES		11,160,336.16	9,086,188.00	2,074,148.15
TOTAL FORESTAL		**3,389,788,012.80**	**3,247,659,679.71**	**142,128,333.09**

The prominence of pressures for the use of forestland for agriculture and grazing, as well as illegal logging , can be explained by social and economic dynamics that are deep-rooted in rural Mexico, caused by the fact that the rural development model during the majority of the 20th century was built on a policy of encouragement of growth in the agricultural sector. Forestry policies, always subordinate to the aforementioned policy, suffered a swing between conservationist and productivist perspectives (manifested in exploitation concessions for private and state businesses). The only common denominator was the denial of opportunities for communities and ejidos to administrate and directly exploit their resources (Merino, 2004; PEF 2025, 2001). This exclusion of rural communities from the exploitation of forest resources that they nominally owned, added to demographic growth and scarce economic opportunities in rural communities encouraged the opening of land for agriculture and grazing, while the use of forest resources, forced to be illegal, was tolerated and encouraged due to a frequent uncertainty about ownership rights. The results were devastating for the forests and jungles of the country, and environmental services rendered, decreasing the quantity and quality of water resources, and erosion control. Flooding and natural disaster risks also increased.

Despite the fact that since the 80s direction of forestry policies have started to change, and communities have started to be considered as responsible actors for development of the sector, it was not until 1994 that, within the framework of the newly established government body, the department of the environment, natural resources and fishing (now the SEMARNAT), started to perceive the forests as an object of public policy for sustainable development schemes. The forms of protection continue to be limited to Protected Natural Areas where community management is instrumental to uphold the conservationist principles on which this initiative is based. These first experiences provided the basis for the elaboration of the 2001 PEF 2025 (the strategic forestry plan 2025), which was designed from the general study of deterioration of forest resources linked to rural poverty. This information showed that the development of the sector was not only important in itself, but also had consequences of such a magnitude that it could be considered an issue of national security. Within this framework the proposed general goal has been to achieve “sustainable forest management” through the completion of the following objectives:

- The forestry sector, intrinsically linked to the functioning of ecosystems, should be approached with this in mind (particularly in terms of the management of hydrological basins, forestland conservation and the protection of biodiversity) and as a sector that belongs to the area of environmental action.
- Private initiative is the main element responsible for the development of the forestry sector. In this area community forest enterprises (EFCs) are key, because they epitomize the formal objective “to actively drive community participation in forestry projects.”

- To Generate “economic instruments to drive conservation and restoration of ecosystems”. From this objective comes the establishment of the first schemes of payment for environmental services (PCIs).
- Concrete forestry policies should be the result of wide-ranging processes of “consultation with participants and groups of specialized professionals.”

With these guidelines an institutional design can be structured that integrates forestry with environmental action. Together these guidelines can respond to the need for sustainability through the partition of sectors among the different bodies attached to the SEMARNAT. Within this initiative, the CONAFOR (the national forestry commission) was created in 1986 as an interdepartmental commission (between the SARH, SEDUE and SEDESOL) whose objectives are realized through the implementation of a diversity of support and regulation programs. Nevertheless, the articulation between sectorial programs inside the SEMARNAT requires revision to avoid a crossover of objectives, and the integration of national forestry policies is only just beginning with other policies that directly or indirectly involve forest resources, such as agricultural policies dictated by the SAGARPA (the department of agriculture, livestock, rural development, fishing and food) and the territorial regulations managed by municipalities. Other challenges for the forestry sector are the strengthening of criteria for the evaluation of relevant programs; sustainability of production organizations; the effective combat of poverty; and especially the establishment of indicators of social impact on beneficiaries.

4. ORGANISMS IN CHARGE OF THE FORMULATION AND IMPLEMENTATION OF FORESTRY POLICY.

One of the most important consequences of the PEF 2025 was the reformulation of the CONAFOR, to give them more powers and autonomy in relation to the decentralized organism SEMARNAT. Furthermore, the necessity to create a new legal infrastructure that regulates and articulates the proposals of the PEF 2025 lead to the drafting of the LGDFS (general law for sustainable forest development) in 2003, where the incorporation of the forest sector in the area of environmental action was formalized once the SEMARNAT was assigned the task of “Formulating and running the national policy for sustainable forest development, and assuring its coherence with environmental and national natural resources as well as those policies related to rural development.”. This function is carried out in coordination with the CONANP (commission of protected natural areas) and the PROFEPA (Federal attorneys office for the protection of the environment) through seven instruments established in the LGDFS: the planning of forest development, the Sistema Nacional de Información Forestal (the national forest information system), the Inventario Nacional Forestal y de Suelos (the national forest and soil inventory), forest zoning, the Registro Forestal Nacional (the national forest registry), the Normas Oficiales Mexicanas en materia Forestal (the official Mexican regulations in the area of forestry), and the Sistema Nacional de Gestión Forestal (the national system of forest management).

The SEMARNAT delegates the sectorial plan to the CONAFOR, only keeping its control over the dictating of forest management plans. These plans are carried out with “the authorization that in terms of environmental impact is obligatory in accordance with the LGEEPA (The general law on ecological balance and environmental protection) for the use of resources in tropical jungles and species that are difficult to regenerate; planting in forest areas, changes of land use in forest areas; as well as in jungles and arid regions. In this way, the management plans are constituted in the principal regulatory instrument for the protection of the environment in areas for use of forest resources.

The CONAFOR has the function of “developing, encouraging and driving activities of production, conservation and restoration in the area of forestry, as well as participating in the formulation of plans and programs, and the application of sustainable forest management policy.”

The principal authority of the commission is the government board comprised of heads of the departments of national defence; the environment and natural resources, the economy; the treasury and public credit; social development; agriculture, livestock, rural development, fishing and food; agrarian reform; tourism; as well as the Comisión Nacional del Agua (the national water commission).” The participation of the federal authorities involved is presided over by the Secretario de Medio Ambiente y Recursos Naturales (department of the environment and natural resources). This structure was established with the intention of driving necessary intersectorial coordination to achieve sustainable forest development. Nevertheless, in practice it has been extremely difficult to accomplish, beyond the

establishment of basic regulation. In this respect, the most urgent task is to integrate forestry policy with agricultural policy which, in the case of the design of REDD mechanisms, is being tackled with consideration of not just the forest areas in temperate forests and jungles, mainly under the control of the CONAFOR, but the areas of scrubland that are under the control of the SAGARPA and constitute the most abundant type of vegetation in the country. Scrubland is also, in many cases, the interface between areas considered forestland and areas that are not, where many of the mechanisms operate that lead to deforestation.

For the completion of these functions the CONAFOR has two departments: that of production and productivity; and that of conservation and restoration. These departments design the main instruments of forestry policy and concentrate the main part of programs that could serve as a basis for REDD strategies.

The functions of inspection, surveillance and sanctions are carried out by the PROFEPA (the federal attorney's office for protection of the environment) that has the job of combating illegal logging and faces notable obstacles that impede the completion of its tasks, such as gaps in legislation and scarcity of budgetary funds and personnel. For this reason, for some years programs for the prevention of illegal logging are being implemented, that are progressively prevailing over punitive programs. These prevention programs are realized with the aid of communities through the creation of forest watch groups.

The academic institutions have played a very important role in the generation and validation of information necessary to establish the technical instruments for forestry policy that are demanded by the LGDFS and to develop methodologies for carbon accounting associated with the forestry and agricultural sector, while the INE (the national ecology institute) has exercised a notable influence over the design and evaluation of programs.

It remains to effectively incorporate communities in the drafting of forestry policy and convert them in active agents in the design of solutions rather than simply receivers of subsidies.

5. THE OPERATIVE PROGRAMS OF FORESTRY POLICY

The support programs in the forestry sector have evolved from the year 2000 in two main directions. The first is the consistent link with the fight against poverty, be it through subsidies, job creation, the support of sustainable forest management, or the provision of funds for alternative production activities. The second is towards the design of transparent operation regulation that avoids the uncontrolled assignation of resources and establishes concrete goals that are subject to evaluation. This has required a constant effort to avoid duplicity in functions and contradictory stimulus between programs and has not always given the best results. Unfortunately this effort is almost solely confined to organisms in the area of environmental action, while coordination has been weak with other federal bodies with influence in the sector and state governments. The process of consultation for the implementation of the REDD strategy should be capable of incorporating opinions, articulating objectives, and establishing commitments among key organisms for forestry policy, such as the SAGARPA, the departments of agrarian reform and social development. .

Many of the existing programs for the sector have elements apt for incorporation in changes and improvements in the REDD strategy. Below, only the most important are mentioned inside each organism.

5.1 PROCODES

Community management of natural resources was promoted in the ANPs (Protected Natural Areas) through the PRODERS (the program for sustainable regional development) -- now the PROCODES (the conservation program for sustainable development) -- that financed projects for the sustainable use of forest resources in ANPs and, later, in the RPCs (priority conservation areas) The program initiated practically at the same time as the SEMARNAT with the objective of combating "the vicious circle of environmental degradation and poverty" and converting it into a "virtuous circle" in the ANPs and RPCs.

The PROCODES give resources for the financing of production projects inside the ANPs and RPCs and, therefore, constitute one of the main instruments to drive social development in these regions. In the four different project areas that are supported in this aforementioned program, the forestry projects are inserted in the area of "Conservation and restoration of ecosystems" and include projects for tree-planting, enrichment of sunflowers and reforestation. Support for these programs is directed towards forest ejidos and communities in a group potentially encompassing 816 municipalities in 203 RPCs. For

this reason, in 2008 PROCODES had a budget of 160 million Mexican pesos (representing a return to the budget size in 2001, as the size had diminished progressively during the last government administration, reaching only 99.8 million Mexican pesos in 2006).

5.2 PROÁRBOL

PROÁRBOL is the policy of the Federal Government designated for the conservation and restoration of forests, jungles and vegetation in arid and semi-arid regions in Mexico. It is not a program in itself, but rather an umbrella term for the 45 support programs that were administrated by the CONAFOR until the last government administration. The union of these programs under PROÁRBOL, apart from facilitating access for beneficiaries that only have to deal with one body, allowed the homogenization of diverse criteria for the provision of support and the coordination of inter-related programs.

The program has the following proposed objectives: "combat poverty, recuperate forestland and increase productivity in forests and jungles in Mexico." In this sense it follows the line of forestry policy driven by the PEF 2025 and the Programa Nacional Forestal (National Forestry Program) 2001-2006. This political line proposes that sustainable management of forest resources can be achieved through passing the rights for the exploitation of forest resources to forest owner sin forest communities and ejidos. In this way, although the collection of programs included under PROÁRBOL each have their own crtieria to assess the eligibility of applicants, they all share basic criteria to favor projects in: ejidos and communities; in highly or very highly marginalized municipalities; with the indigenous population and/or female land ownership. Additionally, forest zoning is operationalized through the focusing of a program on specific territories or through pre-criteria that favor areas considered as priorities for the objectives of the program in question.

5.2.1 CONSERVATION AND RESTORATION

Despite the fact that in only 5% of forest communities forestry represents the central economic activity, the forests are a fundamental resource in all of them. They are a source of variety of goods directly destined for family consumption (Food, medicine, firewood, building materials, et cetera), or are commercialized to generate income. It is thanks to the presence of the forests that these populations can attend to their "subsistence needs that are not sufficiently internalized for the national economy." (World Bank, 1995). In socio-demographic terms, another relevant characteristic of forest regions is the large migration of the workforce, due to which, despite high birth rates, the average population-growth rate is 2.4%. The average time in school is 3.3 years while the national average is 7 years. It is also estimated that 37% of the population (over 15 years old) is illiterate.

The majority of these communities show the affects of a strong impact by migration. The situation in these cases is characterized by a degraded system of organization where all traditional structure has been lost and duties to represent the community are executed through obligation rather that conviction.

Support for the conservation of forestland and associated soils, projects for reforestation as well as prevention and combat of forest fires, is provided in accordance with pre-criteria in favor of areas considered as a priority by CONAFOR. In general, the objective to combat poverty leads to the creation of more or less stable employment in tree nurseries or temporary jobs for each project. This strategy has the obvious limitation of constantly depending on the national budget and only lasting as long as government funding is available and no longer. In this respect to this, REDD strategies will contribute to breaking the logic of state subsidy as long as people are capable of valuing the positive external elements of forests, and change the perception of workers that they are "working for the government" to am mind frame where they feel they are "maintaining and offering a service."

Reforestation projects have historically failed due to deficiencies in planning and for their non-existent follow-up. The operation regulations have been laid down with the intention of tackling this problem offering support for the establishment, maintenance and protection of reforested areas, paving the way for support programs that have survival rates of over 50%. Additionally, for the first time the commitment to transparency in the demonstration of results for reforestation campaigns has been publically established. These are mechanisms that are apt for incorporation in the REDD strategies, although their results should be evaluated.

The success of the mobilization and international defense of indigenous communities has presented many communities with another type of challenge. The emergence of indigenous spokes-people with world experience, organized in coalitions, alliances, and national organizations and networks, has damaged direct communication with communities and even mutual understanding between the

spokes-people and the communities where they live. It has been possible to share information horizontally between indigenous leaders, but it has not always been possible vertically between leaders and the community itself.

5.2.1.1 PAYMENT FOR ENVIRONMENTAL SERVICES

Attached to the area of conservation and restoration, the different programs of payment for environmental services constitute one of the main uses of the budget of PROÁRBOL. The environmental services that are promoted are hydrological, or, focused on capturing of carbon, or conservation of biodiversity There are considerably more projects currently functioning that deal with the first two areas that the third. The program for the PSAHs (payment of hydrological environmental services) included at its conception the consideration of two of the premises that today are perceived as desirable for the RDD mechanisms: Compensatory payment to avoid deforestation and the search for adjoining benefits such as the combating of poverty and the protection of biodiversity. In this aforementioned program the areas of interest are water storage in populated areas as well as areas with scarce or over-exploited water resources.

To estimate the compensatory amount to pay,, the opportunity cost was calculated for rural workers not using the forest for agriculture or grazing. It is clear that for the REDD mechanism it is not sufficient, as an equivalent on a national level would require not just an estimation of opportunity cost for rural workers, but also of an enormous group of economic activities that could potentially be affected by the conservation of forestland, such as tourism, transport infrastructure and the establishment of agro-energetic crops. Nevertheless, the exercise can be considered valid for a minimum estimation of opportunity cost, particularly taking into account the fact that a large part of the resources provided by REDD for a given country must be given, through relevant mechanisms, to the population settled in forests and jungles. Preliminary evaluations realized by the INE COLPOS, shows that the program has had a positive impact on reductions in deforestation rates(on land that receives the support the deforestation rate is less than half of that observed in land not in the program). However it has also been detected that the deforestation avoided may have transferred to other land. The REDD should implement mechanisms that impede the transfer of this problem to other areas at a national and local level.

Even with the importance given to the program by the CONAFOR, the program has received criticism expressed through the opinion that these payments are perceived as subsidies for doing nothing in the forest, which does not make communities responsible for forest conservation. There are two types of pre-criteria for the provision of subsidies: social (marginalization, presence of indigenous people, gender) and techno-environmental (percentage of tree-coverage in forests, Protected Natural Areas, priority mountains for the CONAFOR, over-exploited water sources, deforestation risks, availability of water, Ramsar sites, AICAS [areas of importance for the conservation of birds]). Nevertheless, a challenge for the future will be to include, in the criteria for evaluation, social factors that eventually determine the durability of the programs.

The CONAFOR intends to incorporate 2.5 million hectares in the payment for hydrological environmental services scheme with an estimated expenditure of 6,600 million Mexican pesos in the poorest communities. It remains to be mentioned that since the possibility of developing the market of environmental services was proposed in 2003, technical and financial support was provided by the World Bank and the GEF. The financial support amounts a 45 million dollars lawn by the World Bank and a 15 million dollars donation by GEF to implement the program. The 45 Million lawn is not additional to the CONAFOR´s annual budget as it is the 15 Million dollars donation, once the disbursement is done after activities are carried out by CONAFOR. So finance is not the best advantage from this bilateral international agreement, but access to technical assistance makes really a good contribution to the country´s preparation on the subject of local mechanisms of payment for environmental services.

In its beginnings, an annual amount of 200 million Mexican pesos was provided which increased from 2004 to 2006 to 300 million and from 2007 the amount was 1 billion pesos (CONAFOR) coming from the federal annual budget and from resources obtained the charging or rights through the Ley Federal de Derechos (federal rights law). The payments are made over a period of five years through the Fondo Forestal Mexicano (the Mexican forestry fund). In this program the monitoring of land is carried out using techniques of remote sensing as well as field-verification to assure the fulfilment of the terms of the PSA contract.

For its part, the PSA-CABSA program (program for the conservation of biodiversity, carbon sequestration and management of agroforestry systems) has a budget that surpassed 100 million

Mexican pesos in 2004 to reach 400million in 2008. The payments have been made with the objective of supporting capacity-building among forest owners and forestry professionals to link them to the international market. Monitoring is carried out annually, using information based on field-verification to guarantee fulfilment of the terms of the PSA contract (CONAFOR). This program has allowed the strengthening of a group of consultants specialized in the voluntary carbon market associated with forestland. This human capital will be very useful in the implementation of REDD mechanisms.

Both, hydrological and biodiversity concepts of PSA, will contribute their experience on payments on the basis of official procedures and guidelines, which is public instrument to focalize the payments on several year period basis. This is an experience that will help on the verification process as well. The evaluation criteria and definition of eligible zones for the program are also two good instruments, beside the guidelines for selecting and allocating the payments, that have been developed by the PSA program and are expected to be of useful experience for REDD as well, as it is the distribution of payments itself by the "Fondo Forestal Mexicano", which is a fund that manage the money once it is allocated to a community; the fund will deliver the payment only after conditions are achieved by such community regarding the annual or multi-annual program.

5.2.2 FOREST DEVELOPMENT, COMMERCIAL TREE PLANTATIONS AND COMPETITIVITY

Sustainable forestry management is supported in different phases in sequence, from the formulation of projects to the establishment of production chains. Once the forest management scheme or establishment of a forest plantation is authorized by the SEMARNAT, the programs establish a collection of requirements that make beneficiaries co-responsible for the financing of the projects. These types of mechanisms help to assure the continuity of the project, but they can represent an obstacle that excludes the poorest communities from access to this support. Although advances have been made in this respect, mechanisms for creative co-financing should be continued to be developed. These co-financing schemes could be through payments in kind, or through additional support graded by the level of marginalization in the community. It would be a similar scheme to that used for the production programs of the SAGARPA.

Sustainable forest management can be encouraged by REDD mechanisms, as some studies show that land under forest management has lower deforestation rates that those that do not. Due to this, volume of carbon in the air begins to stabilize and remain in the soil through practices that avoid erosion.

5.2.2.1 COMMUNITY SILVICULTURE

Directed to communities, and indigenous groups, this branch of support schemes for forest development deserves special attention because the projects place the biggest emphasis on making sure the communities are as trained a possible to succeed in the sustainable management of forest resources. This is expressed in the diversification of products (in particular non wood products) that form part of the richness of the culture)

The strategy of the CONAFOR to drive community silviculture is based on the promotion and consolidation of community forest enterprises with ways to produce timber products, non wood products and environmental services. The strategy was put into practice in the second edition of the PROCYMAF II (program for the management of forest resources) and works on three main elements: the identification of new sector-based approaches, the support of specific population groups (particularly indigenous groups) and being a "launching point" for the generation of institutional synergies for sectorial development.

It is in this program where discussions on forestry policy linked to poverty took shape, due in part to the fact that those who pushed for the creation of the first PROCYMAF perceived it to be the program that would lay down the guidelines for forestry policy. The discussion went beyond philosophy and tackled operative structure and decentralization, at least partially, of its functions.

Some 70% of the current resources of the 70 % PROCYMAF II came from the World Bank and the remaining 30% from the beneficiaries and the government, which in the case "limited" itself to financing almost exclusively the consultancy on production. These figures clearly reflect that this program has not been considered important in the national budget up to now, despite the fact that it is the only program that really articulates social variables in a complex way (incorporating for example the concept of "social capital") and also follows up and participates in many community assemblies and in numerous meetings with those responsible for the program. Nevertheless, if this diagnosis is valid in relation to the previous government administration, in the last update report of programs supported by the CONAFOR´s there is a huge number of support for the generation of management plans, which may indicate that

silvicultural production projects or commercial forest plantations may well increase in the near future. Also, once the World Bank had satisfactorily concluded its support of the program, the CONAFOR re-took it, maintaining the same budget and continuing to work in the states where the support is given.

The experiences of the integral programs (a program that accompanies the development of a production project through its entire development) like those of the PROCODES and the PROCYMAF, have formed a whole generation of specialists in community participation in forestry projects that represents an invaluable human resource to build on the formation of social capital in REDD mechanisms.

Currently, approximately 2.27 million hectares of forest and jungle have been incorporated, since 2003, with funding from the Mexican forestry fund of 4,203 million Mexican pesos, given to more than 4,803 ejidos, communities, small forest owners and associations of silviculturists. From 2008 technical assistance is also paid for along with environmental services and the creation of local markets will be encouraged. From 2009, the Program will pay six different amounts per hectare per year, on the basis of a five year contract. Each payment area is being defined by the ecosystem type and its risk to deforestation and forest degradation.

5.3 THE VIGIAS PROGRAM AND MUNICIPAL ENVIRONMENTAL CERTIFICATION

To effectively tackle illegal logging, in 2008 the PROFEPA launched the VIGIAS (Watchtower) program that consists of training and certifying "autonomous social organisms" that are subject to decisions made by the assemblies at the center of ejidos and communities, which have the task of contributing to the control of illegal logging. The program fundamentally is compliant with the fact that it is the communities themselves that can detect and denounce the illegal extraction of timber quickest, as well as the commercial networks that are formed around this illegal logging. Nevertheless, the program is confronted with important budget limitations and, even more importantly, social factors such as: in many communities illegal logging is so institutionalized that there is little incentive to monitor it; in the sense that the forests represent the home of communities, an integral part of their culture, and a source of sustenance, many populations have chosen voluntary isolation as a way of contributing to the protection of their rights, and as a form of physical and cultural survival.

Faced with these problems the REDD mechanism could contribute to the valuing of forestland achieved in other areas and provide financial support to the VIGIAS network in proportion to their effectiveness, given the previous facts mentioned about deforestation avoided in areas that are under surveillance in comparison to those that are not.

Another recently created program in the PROFEPA is municipal environmental certification. The program is preventative in nature and is centered on the management of solid waste and treatment of sewage. Nevertheless it is built on an environmental audit and encompasses the establishment of codes in forest territory. The importance of this program for REDD strategies rests in that it the only one that involves the establishment of codes for land use and distribution that is exclusively for municipal government and that impacts on changes in land use from forest to urban land.

6. CONCLUSION: CHALLENGES FOR THE FORESTRY SECTOR

The implementation of REDD strategies encompasses challenges for the design of systems for the monitoring of deforestation and, more importantly, forest degradation. Nevertheless in this area there is a trained team to make optimum use of the information resources available which means that only institutional design and public policy instruments present the most relevant challenges to face.

The main challenge among those mentioned is how to definitively achieve articulation between forestry and agricultural policy, for which reason the incorporation of SAGARPA, the SRA (department of agrarian reform) and rural organizations with national representation is necessary, so that they may be central stakeholders in the design and implementation of REDD strategies. This incorporation should transcend the necessary regulation of the agriculture sector to recognize the complementary nature of both sectors in rural development and the importance of agricultural land and scrubland in the decreasing of carbon emissions.

Another of the challenges will be designing tools that allow the strengthening of codes for organizing and distributing land as an effective instrument for the protection of forestland , regulating the

capacities for modification of this goal, which today is common practice when faced with a development project (like the establishment of tourist o mining complexes). Authorization is must be obtained for these types of projects, after an analysis of environmental impact, as well as for forest exploitation projects and these decisions are taken by central government despite the fact the potential impact of such projects is local. Although this could be seen as a model that could work as an environmental mechanism to weigh up against legitimate economic interest, in practice it is a cause of conflict, as the legitimacy of the decision-making authorities is doubted by the affected populations.

On the other hand, since the formulation of the PEF 2025, there have been considerable advances in the design of policies to give priority attention to ejidos and communities. This approach can be justified due to the size of the surface area of forests that is located in these settlements, as well as the conditions of marginalization in which the majority of these populations live.

However, the estimations on land under private or social ownership that were in existence at the time of the formulation of the PEF 2025 were from before the end of the 80s. For whatever reason, be it: questionable methodologies; because an important quantity of forestland owned by ejidos became private property after the reform of the constitution in 1992; and once the Programa de Certificación de Derechos Ejidales-Comunales (program for the certification of rights in ejidos or communities) was finished in 2007, the data was inaccurate. The estimation of forests and jungles on social property lowered from 80% to 59% and land and forest resources on private property, previously considered to be less significant, is now estimated at 33.5%. This new estimation demands a study of the processes of deforestation and degradation existing in private zones, with the objective of efficiently tackling them through forestry policy and REDD strategies in particular.

Nationally, emissions from the forestry sector represent 14% of the total of the country (10% from land use and 4% from loss of organic carbon) and in the PECC (the special plan on climate change) it is estimated that it could contribute to 38% of reduction in GHGs. The programs of the CONAFOR count among mitigation mechanisms (carbon conservation; payment of environmental services; carbon sequestration; and environmental services: forestation and reforestation) and the challenges to slow down climate change lies in the development of institutional capacity for promotion, development and implementation of existing programs within the framework of the CDM (Clean Development Mechanism) and the development of local and voluntary markets for PSA..

Today, the challenge is to build once more the representational structures of the indigenous people structures and look back at those who still live and sustain themselves with the earth's natural resources, and in whose name this fight is being carried. Nevertheless, this problem should not be exaggerated, as in the globalized world of today all human societies are experiencing the same tensions in terms of political representation. The voices of the indigenous population speak against change, and a lot of work has to be done to disseminate information in order to break these barriers.

Please present the early ideas and/or ToR for work to be carried out. Please also present the strategy options themselves if they are available.

Annex 2b: REDD Strategy

Please present the early ideas or ToR for work to be carried out. If you decided to merge Components 2b and 2c, you may also wish to merge Annexes 2b and 2c.

Costos de oportunidad de PSAs para evitar deforestación

Background cost-opportunity studies on alternative forestland-use have concluded that the amount of $200 Mexican pesos be used as an incentive to avoid the conversion of forest into land for grazing and

agriculture (Jaramillo, 2002). The current PSAH provides quantities of $450 Mexican pesos per hectare, with a surplus in offers for providers of environmental services and the capacity to attend to all the applications.

On the other hand, for a mitigation program of carbon emissions from deforestation, the opportunity cost of alternative uses must be considered, as well as the operational costs of a carbon emission mitigation scheme, so that the providers of environmental services and those in charge of carrying out the commercialization/operation of the scheme could obtain net gains from this activity.

An issue that will be treated in the consultation process is the following:

Impossibility of identifying the actors who will actually deforest The calculation of opportunity cost for the purposes of REDD assumes that the actors who would, deforest, can be identified and paid an amount equivalent to or slight greater than these opportunity costs, to keep the forest instead. First of all, the tenure situation as regards forest is in most places very murky in practice. Large parts of the forest belongs to communities or ejidos and clearance occurs in the informal sector without official permission because customary rights, or even illegal activities prevail, particularly in circumstances where the state does not have the resources or manpower to prevent it. Clearly to identify the potential individual who will clear a particular patch is virtually impossible, and under these tenure conditions, even if the community or ejido were paid off, a dozen unknown members might step in to clear that patch instead, especially in those communities where internal conflicts exist. In this case, it is obvious that a payments system will not function at all, and opportunity costs therefore have no meaning in terms of forest protection. But even in cases where the land is all under the control of well organized communities or individuals, it is often difficult to identify exactly which actors would undertake forest clearance. This will mean that the projects need to be developed with active participation of the communities or ejidos and well-established agreements have to be developed.

Annex 3: Reference Scenario

Please present the early ideas or ToR for work to be carried out.

The following elements are part of the reference scenario.

Creation of a Deforestation Risk Index

It is possible here to make the most of previous experience from INE and Ecosur institutions, in the creation of a Deforestation Risk Index within the national PSA scheme for hydrological environmental services. The objective of the Deforestation Risk Index is to identify where deforestation is most likely to occur in Mexico through the analysis of changes in behaviour in changes of land use between the period of 1993 and 2000. The index divides the country in five levels according to the probability of a deforestation risk (very low, low, medium, high, very high).

This model considers geo-economic, institutional and socio-economic variables. The objective of the model is to predict, in every forest area in the country, the probability of deforestation according to weight, calculated an econometric model. Currently an attempt is being made to include new variables such as the existence of forest-resource use in any given forest area.

Implementation of the Deforestation Risk Index in the REDD Strategy

One form of integrating the *principal of additionality* in the REDD strategy is through the Deforestation Risk Index. In zones with a low risk of deforestation, the participation in the REDD program would not make a great difference because it would be improbable in any case that there could be a change in land use. On the other hand, en places where the risk of deforestation is very high, it would be necessary to compensate the owners to maintain the use of their property, given that the opportunity cost for not changing land use is very high.

The two main objectives of considering the Deforestation Risk Index are, firstly to more efficiently focus resources in order to pay more where the risk is high. The second objective would be to be able to establish a national goal that is capable of application at a local level. The idea is top ay o reward forest owners according to the level of deforestation risk in their zone.

Evaluate the Impact on Biodiversity and Poverty Together with other Possible Benefits (e.g Supply of Water and Hydrological Environmental Services)

The focus of the REDD initiative on levels of payment to forest owners will achieve important benefits for rural development through the ability to directly benefit ejidos and communities in the forests of Mexico. Nearly 70% of the owners of forest resources are communities and ejidos where there are high or very high levels of marginalization.

The experiences of the PSAH can serve to adjust the REDD mechanism to tackle poverty and marginalization. Even when the main objective is not to combat poverty, but rather help conserve critical forestland for hydrological environmental services, the PSAH program gives points for applications from forest owners that live in places included in the marginalization index provided by the SEDESOL (the department of social development) that show high or very high levels of marginalization. Also, the program gives points if the forest owners live in communities with a majority indigenous population, as this population is considered a group especially vulnerable to poverty and marginalization. The intention is also to generate benefits for biodiversity. Once again, PSAH can serve as an example for how to adjust a REDD scheme to tackle objectives for the conservation of biodiversity. In this area, the PSAH program awards points in within its pre-criteria, if the applicant lives in a federal, state, or municipal protected natural area; if the applicant loves on one of the 60 mountains that are a priority for conservation; or if the applicant is applying with other applicants who are allowing the formation of biological corridors on their land.

Another type of benefit that can be explored, considering once more the experiences of the PSAHs in Mexico, is to link the REDD mechanism to the conservation of hydrological environmental services where priority is given to applicants on land with over-exploited water sources or with a scarce supply of water in the higher parts of hydrological basins.

The experience provided by the PES program will be useful to focalize and make a distribution of payments according to the objectives of any program.

Analysis of the Pros and Cons of the REDD Strategy

Currently SAGARPA is collaborating with the REDD group and the INE with whom a process of exchange of information has begun that allows the analysis of agriculture and livestock programs in terms of their impact on deforestation in forests and jungles in Mexico. The results of said analysis will allow the identification of areas of opportunity for the improvement of inter-institutional interaction in promoting the conservation and sustainable management of priority forests in Mexico through environmental services.

This analysis will reinforce the forest and jungle conservation strategy in terms of plans and programs. This allows the integration of conservation policies through encouraging not only actions taken by forest owners; but also changes at an institutional level such as forest surveillance and the alignment of rural development programs, which are also factors that could influence deforestation levels.

The goal hence is that different government programs are channelled towards the sustainable use of forests and jungles, avoiding its deforestation and, as a consequence, GHG emissions. In this effort, diverse federal government agencies (related to conservation of forests and biodiversity) will be involved

that will participate in decisions on the use of forestland, such as the SAGARPA. The integration of SAGARPA is especially important since it will allow better coordination of policies and programs to help achieve sustainable use of forest resources and a reduction in deforestation that generates GHGs.

The participation of state and municipal government will also have to be integrated into the REDD scheme, with the inclusion of mechanisms through which state and municipal government development goals can be worked on in coordination with REDD goals. Another intention is to make the local development goals coincide with the possible benefits that the REDD strategy may have (for example through the possiblility of including state or municipal forest conservation projects with the goal of obtaining CERs).

Analysis of Pros and Cons of the REDD Strategy

Element	**Potential consistency with development plans and policies**	**REDD interactions with land-use practices and governance at a local level (potential problems to mitígate)**	**Viability and cost of solutions to problems tackled by REDD, considering compensatory policies and other focuses)**
Policies and plans for agricultural development	The effect of agricultural development programs on deforestation should be evaluated, as well as the cost-opportunity of conserving forests for their use.	Achieve that the REDD compensatory payments help to modify decisions for changes in land use, considering the characteristics of local communities.	To look at the amounts of compensation to pay in order to change behavior
State and municipal plans and programs	Plans and programs should be looked for to check their compatibility with REDD goals,	There may be contradictions between state and local development goals and the reduction in emissions promoted by REDD	State and municipal participation can be included in REDD projects, The costs will be related to the capacity of CERs and the cost of these measures against the promotion of alternative use.

Evaluation of Possible Risks to the REDD Strategy

Obstacles:

1. Availability of Experts

A diagnosis will be carried out of the techniques needed to execute area selection, and the monitoring and evaluation of these techniques. Currently, there is already the installed capacity that has been built asa part of the PSA schemes at a national level in the CONAFOR. This has to be evaluated in terms of the additional capacity needed for REDD

2. Aceptance of Communities and Ejidos of the New Policies Introduced by the Government in the REDD Strategy.

The consultation of communities and ejidos that are part of component 2 will help clarify the acceptance of REDD.

3. Analytical Capacity for Remote Monitoring

This will have to be evaluated by the CONAFOR that has been put in charge of the implementation of PSA schemes at a national level in Mexico. This subject is also tackled in component 8.

Risks:

1. Risks of contradiction with the previous national policies

In point 3c which deals with the analysis of the coordination with other development objectives, the possible contradiction between development agricultural policies and the protection of forests is mentioned. Therefore we have to analyze, according to the information we have on the subject, the risks as far as the loss of economic resources is concerned in order to avoid following rural development policies which are against the benefits of conservation.

2. Market fluctuations

Keeping the cost-opportunity studies updated is necessary as well as considering flexible mechanisms to the assignation of payment amounts for REDD that can respond to the change in patterns of pricing for crops. Paying attention to the institutional questions that help protect the forests, such as the capacity to slow illegal logging down and directing REDD resources towards the strengthening of those efforts, constitutes another important aspect of this strategy.

3. Uncertainty concerning the international negotiating processes (Post-Kyoto Conference 2012)

It is possible that the institutional arrangements made in order to provide instruments for REDD in the country will not correspond to the final schemes agreed upon in the post-Kyoto climate change negotiations. This could affect the obtaining of international funds or the acceptance of CERs for REDD. It is for that reason that keeping a flexible design scheme where the national-subnational focus is prioritized (more explanations further on in Component 4), while considering the obtaining of resources through other funding opportunities such as the voluntary market, was decided. This would allow Mexico to be in better position to adapt to the final REDD mechanisms agreements after 2012.

Identification of ObtaclesRisks in the REDD Strategy

Element	**Main obstacle and risk**	**Potential answers to this obstacle or risk**	**Resources, requirements, etc.**	**Probabilities of overcoming the risks and obstacles**
Capacity Technique	Possible lack of technical capacity and specialized staff	Consider in the development of REDD infrastructure, hiring specialized staff and developing an additional REDD training program to the one that already exists.	To be determined by CONAFOR	To be determined by CONAFOR
Acceptance of REDD	Possible acceptance issues, due to, for instance, payment schemes or because of the	A survey will be conducted inside forestall communities in order to have their opinion on the design of	There are TOR on that matter in Component 2.	The more interaction there is between communitites and forest owners, the more viable it

	definition of owners of avoided carbon emissions	REDD.		will be that possible conflict around the acceptance of REDD can be reduced.
Integration of REDD in policies and development plans	A discoordination may exist between the agricultural development policies and the REDD policies.	Once the effects of the SAGARPA development programs are identified, consider what kind of modifications would be necessary in order to be compatible with REDD	Establish the programs adequacy requirements and REDD's.	Depending on the coordination capacity and the costs in terms of alternative uses of forests in agriculture and grazing.
REDD Payment amounts	Increase in cost-opportunity to protect the forests through changes in patterns of pricing of agricultural products.	Look for flexible mechanisms to establish payment amounts; strengthen the institutional capacity in order to avoid illegal logging.	Depending on price fluctuations scenarios.	Being able to compete with alternative uses will depend on the capacity to be flexible when fixing the amounts but also on the capacity to reach an agreement with CERs concerning new prices for the competitiveness of agriculture and grazing.
REDD International negotiations	That the international negotiations lead to a REDD approach that is different from the one decided by the country	Maintain a flexible focus that allows an adaptation capacity.	Participate in the REDD international meetings.	If it is possible, consider a flexible approach to the REDD national proposal making process.