Cover Page

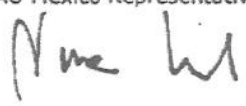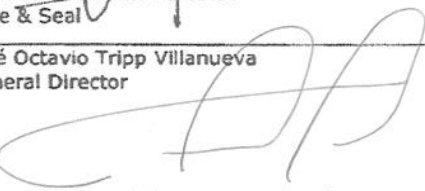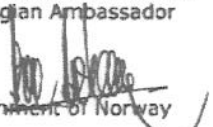Country: México

Project Title: Reinforcing REDD+ Readiness in Mexico and enabling South-South cooperation

Project Outcome(s): Personal and institutional capacities strengthened to reverse environmental degradation, conserve natural resources, promote participatory management and governance over natural resources, and promote human development through policies and programs of sustainable development.

3.1 Principles of sustainable development incorporated in national and regional programmes, including the promotion of equity in the use of natural resources and the distribution of environmental costs and benefits

Project Duration: 3 years Anticipated start/end dates: 20/06/2011-20/06/2014 Managing Agent: UNDP (if/as applicable) Participating UN Agent: FAO Implementing Partner: CONAFOR	Total estimated budget*: NOK $90,000,000 Out of which: 1. Funded Budget: NOK $90,000,000 2. Unfunded budget: _____ * Total estimated budget includes both project costs and indirect support costs
	Sources of funded budget: • Donor • Norwegian Ministry of Foreign Affairs NOK $90,000,000.00*

UN organizations	National Coordinating Authorities
Magdy Martinez Solimán Resident Representative United Nations Development Programme Date & Seal	Juan Manuel Torres Rojo Director General Comisión Nacional Forestal Date & Seal
Nuria Urquía FAO Mexico Representative Food and Agriculture Organization of the United Nations. Date & Seal	José Octavio Tripp Villanueva General Director Dirección General de Cooperación Técnica y Científica Secretaría de Relaciones Exteriores Date & Seal
Witness Excmo. Mr. Arne Aasheim Norwegian Ambassador Government of Norway Date	

* 90 million NOK over three years, donation is stated in USD at UN official rate of exchange

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ACRONYMS

AD	Activity Data
AFOLU	Agriculture, Forestry and Other Land Uses
AWG-LCA	Ad-Hoc Working Group on Long Term Cooperative Action
C	Carbon
CBM-CFS	Carbon Budget Model
CONAFOR	National Forestry Commission
CoP	Conference of the Parties
EF	Emission Factor
FAO	Food and Agriculture Organization
GHG	Greenhouse Gas
GoM	Government of Mexico
IPCC	Intergovernmental Panel on Climate Change
LULUCF	Land Use, Land-Use Change and Forestry
MA	Managing Agent
MoU	Memorandum of Understanding
MRV	Measurement, Reporting and Verification
NIP	National Implementing Partner
N-MFA	The Norwegian Ministry of Foreign Affairs
PSAH	Payment for Environmental Hydrological Services
REDD+	Reducing Emissions from Deforestation and forest degradation, the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks.
RL	Reference Levels
REL	Reference Emission Levels
SCCP	Special Climate Change Program
SMF	Sustainable Management of Forest
TA	Technical Assistance
UN	United Nations
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD	United Nations Programme on Reducing Emissions from Deforestation and forest degradation, the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks
USD	U.S. Dollars
SAGARPA	Ministry of Agriculture, Livestock, Rural Development, Fishing and Food
SWOT	Analysis of Strengths, Weaknesses, Opportunities and Threats

TABLE OF CONTENTS

On May 27, 2010, the Governments of Norway and Mexico signed, through their respective Ministries of Environment, a Memorandum of Understanding (MoU) on Cooperation in the field of Environment, Forest and Climate Change. The MoU includes specific areas of cooperation with relevance to the implementation of strategies and policies for reducing emissions from deforestation and forest degradation, as well as the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks (REDD+).

The cooperation covers three specific lines of actions: i) The development and implementation of a Measurement, Reporting and Verification system (MRV) as part of the post-2012 REDD+ regime; ii) The promotion of Mexico as a centre of excellence for South-South cooperation to exchange experiences and capacities on MRV systems and REDD+ implementation, and iii) Characterization of local incentives: research on REDD+ funding through experiences and case studies in Mexico.

Research on MRV will also be targeted to areas where Mexican experiences may provide particular value as input and guidance to the efforts of other countries, which include the development of a national system for the Measurement, Reporting and Verification of greenhouse gas emissions by sources and removals of sinks, forests carbon stocks and natural forest area changes in accordance with UNFCCC decisions and methodological guidance. In addition, both countries agree to cooperate to promote the dissemination of the Mexican experience developing its own MRV system and to promote the regional exchange of experiences and capacities on REDD+. A particular emphasis will be given to contributions to an efficient process leading up to CoP 16.

While there are many issues relevant to REDD+ Readiness in Mexico and globally, MRV remains as a central element of REDD+ architecture as guarantee that parties will effectively curb emissions from deforestation and degradation under the United Nations Framework Convention for Climate Change (UNFCCC). MRV systems also fostertrust among Parties and instill confidence in the post 2012 international climate regime.At the same time, may methodological and practical issues remain and there is an urgent need to develop and test cost-effective methodologies to implement MRV systems at national and subnational levels. In this sense, the significant Mexican capacity and information, as well as its socio-ecological diversity, offer a clear opportunity to deliver answers to methodological questions in the short-term, both to improve and redefine its own MRV system, and to contribute to the international community with examples of effective methodological approaches. That is why under this Project, Mexico and Norway have chosen to emphasize MRV work.

Mexico is well positioned to develop robust forest carbon measurement and monitoring in the short term, particularly given the fact that it has developed a regular National Forest Inventory and regularly assesses its forest resources. This is a valuable platform on which to build an MRV system capable with reasonably low levels of uncertainty. In addition, Mexico has a critical mass of technical capacity and experience. Activities focused on MRV will start with a series of seminars to run country diagnoses on each component of the Mexican MRV system in order to consolidate Tier 2 reporting, to clarify the institutional framework, to prioritize activities and funding, and to transfer MRV responsibilities to the institutions. These diagnoses will come along with a thorough documentation of the methodologies, approaches, and lessons learned, to share and transfer knowledge. The short term strategy on local incentives research considers the publication of a revised summary on existing locally adapted incentive systems for REDD+ in Mexico. Short-term MRV activities will also include the development and implementation of an operative satellite monitoring system to offer annual national activity data, and methodological research on multiscale MRV systems.

Medium term goals will concentrate on bringing Mexico to the second REDD+ implementation phase. Once the country counts on one year of activity data + conservative estimates on carbon stocks, Mexico could apply for predictable funds to move towards a fully operational MRV system. Simultaneously, Mexico will advance in its effort to reach Tier 3 reporting by parameterizing the Canadian Carbon Budget Model CBM-CFS with data from Mexican ecosystems. In the mid term, the

documents and lessons learned from the short-term analysis on REDD+ financial mechanisms, should revert into changes in national policies and institutional adjustments.

This project will position Mexico as a neuralgic center for South-South cooperation, not only through the documentation and free sharing of the lessons learned and methodologies around forest monitoring and REDD+, but also through the development of in-house capacity through training workshops for national and international participants, and also through external backstopping services.

The role of forests in Mexico's climate policy

Avoiding deforestation has been one of the long-standing goals of forest policy in Mexico. The 2000-2025 Forestry Strategic Program stated a long-term goal of reducing deforestation by 75% by 2025 compared to 2000 levels. According to the Forest Resource Assessment 2010, Mexico has already reduced its deforestation by 50% with respect to 2000 levels.

Mexico adopted its Special Climate Change Program[1] in 2009 including a set of national appropriate mitigation and adaptation actions to be undertaken in all relevant sectors.

The program states an aspirational goal for Mexico to reducing its emissions 20% by 2020, with respect to the business as usual scenario. In January 2010, Mexico increased this level of ambition in the context of its quantified economy wide emissions targets for 2020 under the Appendix I of the Copenhagen Accord and now aims to reduce its GHG emissions up to 30% with respect to the business as usual scenario by 2020, provided the provision of adequate financial and technological support from developed countries as part of a global agreement.

This more ambitious national emission reduction commitment is driving major efforts in Mexico to identify additional opportunities for cost-effective mitigation actions. Reductions in the AFOLU sector already plays a critical role in the Special Program on Climate Change for the short term goals up to 2012 and it is expected that the forest sector will continue to play prominently in the subsequent actions up to 2020.

Project context and goals

The Goal of the Project is to strengthen REDD+ implementation in Mexico and to expand the global knowledge base on REDD+ - related methodologies and approaches. This will be achieved by developing national Mexican capacities for the measurement, reporting and verification (MRV) necessary for the implementation of REDD+, conducting research related to local incentives for REDD+ in Mexico, and promoting Mexico as a centre of excellence for south-south cooperation through the sharing of the methodologies and knowledge created through the project.

This project covers three specific lines of actions:

1. The development and implementation of a transparent, complete, comparable, consistent, and accurate and verifiable Measurement, Monitoring and Reporting (MRV) System to estimate greenhouse gas (GHG) emissions by sources and removals of forest sinks, forests carbon stocks and changes in forest area changes, as part of the ultimate REDD+ regime. Technical and financial support from Norway will enable Mexico to accelerate and reinforce the already on-going development of its own MRV system.

2. The promotion of Mexico as a centre of excellence for South-South cooperation to exchange experiences and capacities on MRV systems and REDD+ implementation. Mexico offers a test bed for methodologies and approaches providing relevant experience for other countries. It is also well positioned to engage in regional cooperation and South-South capacity development.

3. Characterization of local incentives: research on REDD+ funding through accumulated experiences and case studies in Mexico related to efforts to halt deforestation and degradation. Mexico is also entering a process of updating and considering the construction of several financial instruments and funding modalities that include the Fondo Forestal Mexicano, the Forestry Strategic Program, the Forest Investment Program, the national

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[1] http://www.semarnat.gob.mx/queessemarnat/politica_ambiental/cambioclimatico/Pages/pecc.aspx

strategy for REDD+ readiness, and the renovation of the PSAH programme on payments for ecosystem services. The Norwegian support will enable Mexico to share its experience more widely and also to assist the design and integration of local financial incentives to Mexico's national REDD+ readiness efforts as well as planning and implementation.

1. MRV system goals:
   - To accelerate and reinforce a fully operative Mexican MRV system that directs the country towards a leading and competitive position to access credits for performance-based forest mitigation actions (Tier 2 and beyond).

   - To improve country capacities to have better control over their forest resources beyond carbon.

   - To stimulate multiscale MRV measurement and monitoring research to support national REDD+ reporting, and to facilitate in-country subnational REDD+ endorsement.

2. South-South cooperation goals:

   - To position Mexico as a centre of excellence for regional cooperation and capacity development by four different means: i) through the documentation of its experiences, ii) through the dissemination of lessons learned, iii) through the development of in-country capacity courses oriented to train other countries, and iv) through the offering of out-country technical assistance.

3. Experiences and case studies in defining local incentives

   - To investigate Mexican mechanisms, policies, and programs that have slowed deforestation rate and increased forest carbon stocks.

   - To provide decision makers with options for REDD+ financial management deriving from: i) the analysis of incentive programs and policies currently used in the forest sector both nationally and internationally, and ii) from the financial requirements and opportunities coming from the international climate sphere.

REDD+ negotiations

The potential role of reducing deforestation and degradation in developing countries as global climate mitigation tools was already present during the negotiations at the Kyoto Protocol. However, during COP7 in Marrakech (2001), Parties did not reach any agreement due to different views on MRV (Measurement, Reporting and Verification) aspects. In COP11, in Montreal, an agenda item on "reducing emission from deforestation and degradation in developing countries" (REDD) was included. After two years of negotiations, REDD was included in the Bali Action Plan (COP13) which outlined the way forward towards a new, more comprehensive agreement under the Convention which also considered the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks (Figure 1). In Copenhagen (2009), the Conference (COP15) adopted the first official decision relating to REDD+ (Decision 4/CP.15)[2]. The expected REDD+ mechanism is defined as: "developing country Parties should contribute to mitigation actions in the forest sector by undertaking the following activities:
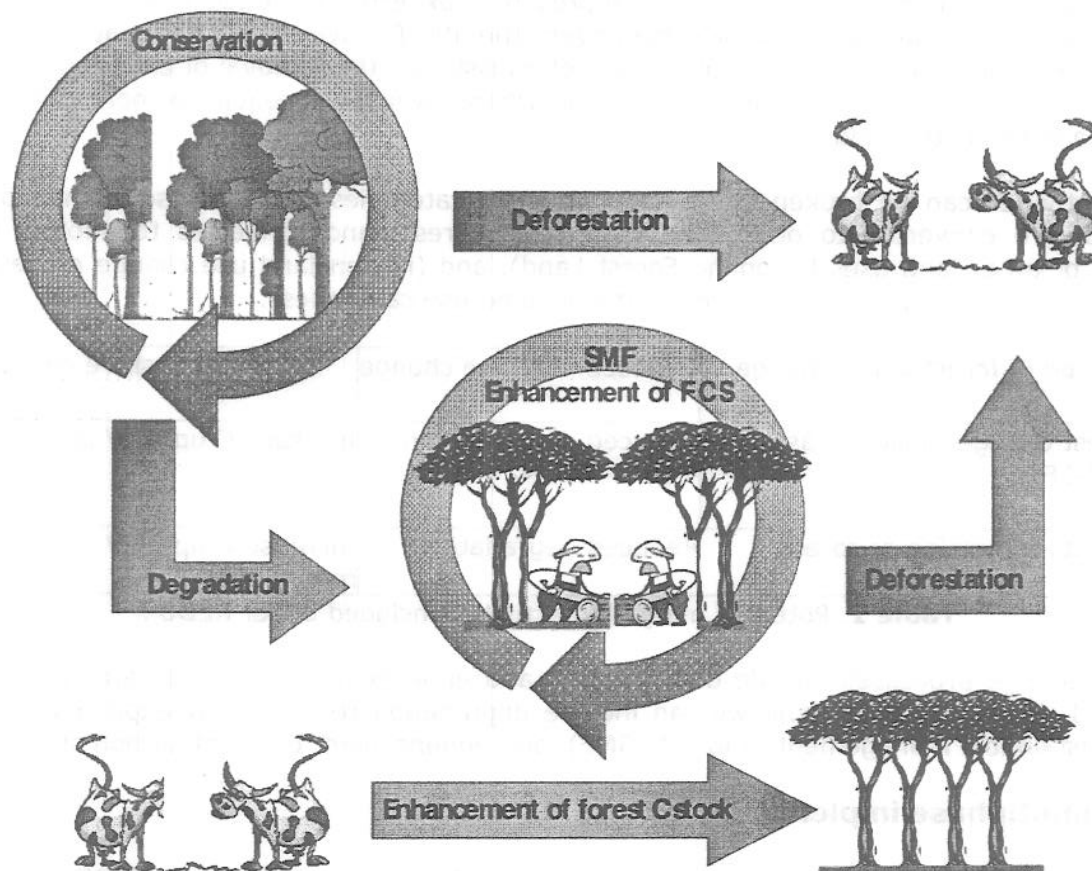
a) Reducing emissions from deforestation;
b) Reducing emissions from forest degradation;

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2 http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf#page=11

c) Conservation of forest carbon stocks;
d) Sustainable management of forest;
e) Enhancement of forest carbon stocks."

Figure 1: REDD+ forest related activities. In this figure arrows show the carbon budget behaviour of the potential activities. Arrows with a gradient from green to red represent potential source of emissions, while the arrow with a gradient from red to green represents a potential removal of emissions. Circular arrows represent a balance with possible positive (removal) and negative (source) results.

REDD+ reporting requirements

Reporting rules for REDD+ have not been finalised and will only be fixed when a final agreement on REDD+ exists. However, some methodological aspects of the REDD+ mechanism were agreed upon at the Copenhagen Conference (Decision 4/CP.15). These aspects (e.g. the decision to use the most recently adopted or encouraged IPCC Guidelines; and the request to Parties to establish a national forest monitoring system) lead to a basic assumption that drives this proposal:

"A non-Annex I Parties that will be ready to submit a comprehensive national forest GHG inventory[3] following the current reporting requirement for Annex I Parties under the UNFCCC, will have the capability to assess and report anthropogenic emissions by sources and removals by sinks under any future reporting rules for REDD+"

The logic behind this assumption is that any REDD+ requirement for forest related GHG estimates will already be covered by a comprehensive national forest GHGs inventory.

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[3]The GHGs Inventory is the instrument developed under the UNFCCC process to measure anthropogenic emissions by sources and removals by sinks. The GHGs Inventory gives the metric of the impact of human activities on greenhouse gases fluxes and concentrations in the atmosphere. Under the Convention, Annex I Parties are committed to report on any human induced emission and removal.

For instance, REDD+ will probably be an activity-based mechanism, based on the five activities listed above. As it is the case for reporting under the Kyoto Protocol, REDD+ reporting rules may not require countries to report on all forest land nor on all the five forestry activities defined under REDD+. However, a more comprehensive approach is expected for REDD+ in order to fulfill the principle of "environmental integrity". Moreover, the REDD+ AWG-LCA negotiation text is also including safeguards such as the "displacement of emissions" (the removal of emissions in one place should not result in an increase of emissions elsewhere) which will require a more comprehensive monitoring of the entire land.

REDD+ activities can be broken down into two main categories: (i) land use change processes, areas that are converted to other land uses (e.g. Forest Land converted to another land use category, or other land uses becoming Forest Land), and (ii) non-land use change processes, land areas that remain as they were (i.e. one of the six land use categories).

Type of forest cover change	Reduced negative change	Enhanced positive change
Forest change (included as LULUCF)	Reduced deforestation	Increase C uptake/ plantation
Forests remaining as forest	Reduced degradation	Increase C uptake/ regeneration

Table 1. Potential mitigation activities included under REDD+

Land use change processes include deforestation and enhancement of forest carbon stock. Under forest land remaining forest land we can include degradation (e.g. from unexploited to exploited forest), sustainable management of forest (SMF), and enhancement of forest carbon stocks.

REDD+ multiphase implementation

Non-Annex I Parties need to follow their own speed when implementing the REDD+ mechanism. This process implies the improvement of their technical, institutional, and legislative capacities to move in the direction of performance-based incentives. The natural gradual improvement of a country's capacities is the reason behind the REDD+ mechanism having a multi-phase approach (FCCC/AWGLCA/2009/17):

"The Conference of the Parties Decides that the activities undertaken by Parties referred to REDD+ activities [should][shall] be implemented in phases, beginning with the development of national strategies or action plans, policies and measures and capacity-building, followed by the implementation of national policies and measures, and national strategies or action plans and, as appropriate, subnational strategies, that could involve further capacity-building, technology transfer and results-based demonstration activities, and evolving into results-based actions [that shall be fully measured, reported and verified]";

REDD+ multi-phase development will include the following phases in order to access financial incentives:

1) Readiness phase: improvement of a country's capacities (e.g. 1-2 years). Readiness funds will offer technical support for countries to develop and start implementing a forest MRV national system.

2) Implementation phase supported by predictable funds (i.e. Amazon Fund): countries will need to have a pre-operative national forest monitoring system and data on forest land use changes for at least 1 year + conservative estimates of forest carbon stocks. As soon as the MRV system will start to be pre-operational with the data conditions mentioned before, its

future development will be supported by a predictable funding scheme spanning over a few years. This will be transitional funding.

3) Operational phase with performance-based payments: countries will need to have the operative national forest monitoring system + country specific data and uncertainties of their forests' carbon stocks and carbon stock changes, and national forest inventories of GHG emissions by sources and removals by sinks. In the long term, the operational national forest MRV system that a country will put in place through the implementation of this proposal should allow it to participate in a mitigation mechanism connected with the other mechanisms under the convention.
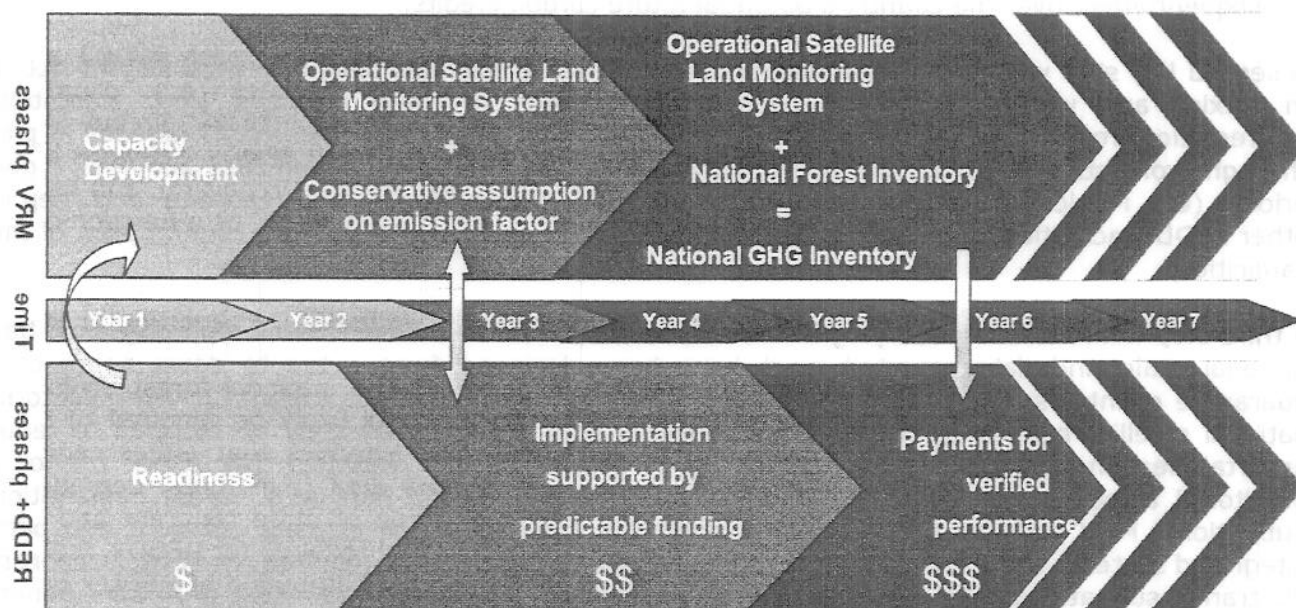
Figure 2: REDD+ phased implementation supported by MRV systems. This figure shows the multi-phase implementation of REDD+, integrated with elements of an MRV system.

REDD+ in Mexico

REDD+ provides a unique opportunity, both in the national and global scales. Mexico has suggested an integral strategy for the implementation of this mechanism. On one hand, the MRV national system would be developed according to the international agreements within the framework of UNFCCC or Post-Kyoto Protocol, keeping the principles clearly defined during the negotiations. The MRV system will lead Mexico towards a transparent, complete, consistent, comparable, and accurate reporting at Tier 2 −or beyond- in 2013, with a fully operative MRV system supporting the REDD+ mechanism and other commodities beyond carbon. On the other hand, the suggested MRV national system would serve as the basis for the implementation of a wider national policy, coordinated in accordance with the assumed mitigation and adaptation goals. To progressively advance in the implementation of its MRV system, Mexico will follow the next steps:

REDD+ readiness: Country diagnosis and improved capacities

The implementation of the REDD+ mechanism in Mexico will start with a diagnosis of what has been done, how, where, and by whom. The goal of this step is to run a SWOT analysis of strengths, weaknesses, opportunities and threats to identify which are the priority actions to help Mexico speed their advancing towards a fully operational system that will allow Mexico receive carbon credits for verified performance. Capacity building is foreseen through specialized workshops, technical support and research on available methodologies.

This process will require a series of institutional workshops to identify and characterize existing relevant data, tools, systems, and the current institutional arrangements and synergies to support REDD+ implementation. Mexico will have to document and identify all the currently existing methodologies and gaps in their methodologies. Gaps will refer to reporting requirements under the Climate Convention: transparency, consistency, coherence, completeness and accuracy.

Among the activities to reinforce REDD+ readiness this project will promote multi-institutional meetings to debate and agree on the definition of "forest" under REDD+ (which might agree or not with the Mexican definition of "forest" under the Kyoto Protocol). Different definitions will affect Mexico's ability to detect different forest processes, such as degradation or conservation, with the consequent effect over the country's potential future carbon credits.

A second key step will be the identification of which forest activities belong to each REDD+ activity in Mexico and what has already been done on each of these activities (e.g. plantations, reforestation, revegetation as part of REDD+ enhancement of forest carbon stocks, already in place through ProForstal initiatives). Moreover, Mexico will need to define which REDD+ activities it gives priority (e.g. Mexico can choose which REDD+ activities they prefer to start reporting, and keep the other REDD+ activities for a second stage, advancing in a progressive manner, as a function of their capacities).

A third step will focus on identifying multiscale needs for REDD+. While REDD+ reporting must be at national scale and data reported must have been designed from a top to down approach to guarantee country specific data and country specific uncertainties (i.e. national forest inventories, national satellite monitoring systems), subnational MRV systems will likely be required to reduce uncertainties and to support the monitoring of certain REDD+ activities that either cannot be monitored through remote sensing or require substantial ground data (e.g. forest degradation). Subnational MRV systems will certainly support the implementation of more coherent and better integrated systems to control forest resources but are not necessarily required for REDD+ reporting. Contrarily, subnational MRV systems are more related to potential redistribution of REDD+ benefits and subnational compliance with national REDD+ targets.

A fourth key step will include the identification of those forest processes and activities that are major contributors to the national forest emission balance: key emissions and key absorptions. It is a reporting requirement under the Climate Convention, and it is clearly stated under the IPCC Guidelines, that these key categories must be monitored and reported with higher levels of accuracy and lower uncertainties (Tier 2 reporting). Among REDD+ activities, and independently of country preferences, deforestation and degradation will be considered as key categories. In order to guarantee Tier 2 reporting for key categories, Mexico will have to document and identify all the currently existing methodologies and gaps in their methodologies.

Why do countries need to report at Tier 2 for their key categories under the UNFCCC?

Tier 2 requirements include country specific estimates and uncertainties. These two conditions are a guarantee that donors/market are paying for performance-based actions whose thresholds of error are known. Without uncertainty information, countries undertaking REDD+ will not be able to demonstrate credible reductions in deforestation and/or forest degradation. Few donors/potential carbon credit buyers would be interesting in purchasing carbon credits with unknown uncertainties that only bring hot air.

Countries willing to report key categories under Tier 2 will need to develop national forest inventories (NFI) to estimate country specific data on carbon stocks and stock changes and their uncertainties, and a satellite forest monitoring system with ground validation that facilitates the estimation of land uses and land use changes, and their associated uncertainties. While countries can start using default values provided by the IPCC (Tier 1), their access to performance-based financial rewards will be retarded by the lack of country specific data + uncertainties. For these reasons, it is strategic to bring higher level of exigency to the countries, in exchange of guaranteed technical compliance with UNFCCC and donors´ requirements.

REDD+ implementation supported by predictable funding: moving towards a preoperative MRV system

In order to move towards the second stage of REDD+ implementation, Mexico requires at least 1 year of data on national land use changes and conservative estimates of national forest carbon stock changes.

Unlike many other non-Annex I countries Mexico counts on a robust national forest inventory which offers good quality data on carbon stock changes. However, the country does not yet count on an operative satellite monitoring system to offer 1 year data on national land use changes. Therefore, Mexico's priority in terms of accessing predictable funding would be to develop a robust, operative satellite monitoring system. Once the diagnosis has been made, efforts will then concentrate on this component.

MRV in the international context

It is a COP15 Decision 4/CP15[4] that non-Annex I countries interested in the REDD+ mechanism should:

"Establish, according to national circumstances and capabilities, robust and transparent national forest monitoring systems and, if appropriate, sub-national systems as part of national monitoring system".

The most operative way to establish a national forest monitoring system and to demonstrate credible (transparent, consistent and accurate) reductions in deforestation, forest degradation, and/or increases in carbon absorption, is through an MRV (Measurement, Reporting and Verification) system. An MRV system is a combination of components that are interrelated and coordinated to obtain a final common goal, which in our case is the development of an inventory of Greenhouse Gas (GHG) emissions associated to human practices that affect the forest sector, with particular interest on the REDD+ activities.

National MRV systems are a key guarantee that Parties will effectively meet their respective mitigation commitments under the United Nations Framework Convention for Climate Change (UNFCCC), while building trust among Parties. National MRV systems will be key pillars for purposes

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4 http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf#page=11

of accountability and credibility of the governance system of the post-2012 international climate regime (Wemaere 2009)[5].

Forest monitoring system should <u>provide forest emission estimates</u> that are transparent, consistent, and as far as possible accurate. To do so, countries should:

i) Use a combination of remote sensing and ground-based forest carbon inventory approaches <u>for estimating, as appropriate, anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks</u>, forest carbon stocks and forest area changes.

ii) Provide estimates that are transparent, consistent, as far as possible accurate, and that reduce uncertainties, taking into account national capabilities and capacities;

iii) Are transparent and their results are available and suitable for review as agreed by the Conference of the Parties"

As REDD+ reporting rules remain undecided, countries need to take a conservative[6] approach to MRV to ensure their forest MRV systems will be applicable to the forthcoming accounting rules. Bearing in mind these uncertainties, the most dependable approach for a national forest MRV system is to develop a monitoring system covering the national territory that falls under the country's definition of 'managed land'. MRV systems are fundamental for REDD+ implementation.

Priorities for REDD+ implementation in Mexico

✓ Consolidating Tier 2 reporting considering the UNFCCC reporting principles: transparency, completeness, consistency, comparability, and accuracy. Reinforcing capacities and institutions on Tier 2 reporting.

✓ Improving methodologies and linkages between multiscale MRV systems to improve REDD+ measuring and monitoring and advance to Tier 3 reporting.

✓ Developing a Mexican national satellite monitoring system to monitor and report on nation-wide changes on land uses.

National forest MRV system design

There is not one methodology to develop an MRV system. In general terms, however, a comprehensive national forest MRV system should consider 3 major components for measuring, monitoring and reporting anthropogenic GHG emissions by sources and removals by sinks in the forest sector (Figure 3):

1) a Satellite Land Monitoring System to assess activity data (AD), forest area and forest area changes. This component will need to be combined with ground data.

2) a National Forest Inventory to assess carbon stocks and changes in carbon stocks (i.e. emission factors - EF);

3) a National Greenhouse Gas (GHG) Inventory to estimate and report anthropogenic emissions by sources and removals by sinks;

Besides these three main pillars, the MRV system also needs to consider and develop:

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5 http://www.iddri.org/Publications/Collections/Idees-pour-le-debat/ID_0709_wemaere_mrv.pdf
6 The conservativeness factor acts to decrease the risk of underestimating emissions or overestimating removals (Grassi et al. 2008).

4) a component on historic deforestation and degradation (REL) and/or on the roles of forests as sinks of GHGs (RL).

5) an institutional framework with well defined responsible authorities for the coordination and implementation of each component and its final integration under the national GHG Inventories and its final reporting under, for the overall quality of reported estimates to UNFCCC and for the fulfillment of procedural requirements and safeguards of REDD+.
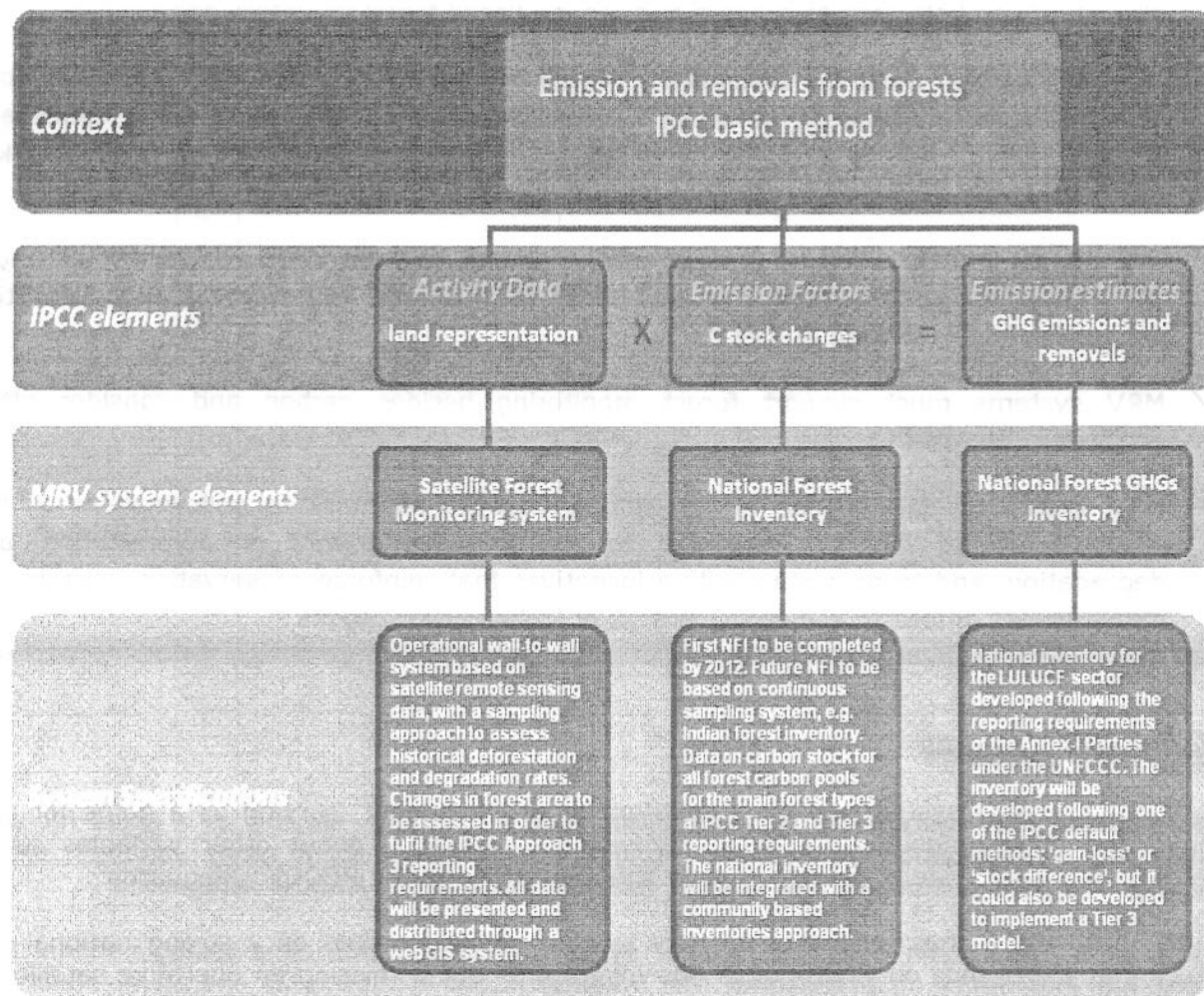
Figure 3: The three basic "carbon-related" MRV elements: (i) a Satellite Land Monitoring System; (ii) a national forest inventory; (iii) national GHG inventory, and their relation to IPCC methodologies.

> **Characteristics of an MRV system to support REDD+ implementation**
>
> ✓ Multiscale: designed to measure, monitor, and report forest resources at a national scale, although with the possibility to measure and monitor at subnational levels. The subnational measurement and monitoring level will allow reducing uncertainties at the national level, and help monitoring subnational REDD+ efforts.
>
> ✓ should rely on both remote sensing and ground based forest inventory approaches.
>
> ✓ the MRV system must be transparent (=well documented robust methodologies; open and freely available data), consistent (=similar methodologies along time, space and scales) and as far as possible accurate (= reducing uncertainties at least for key categories, and incorporating Quality Control and Quality Assessment in all steps).
>
> ✓ the implementation must be gradual and using the best practices and guidelines under the IPCC (IPCC, 2003). Best practices under IPCC require key emission and absorption categories to be reported at Tier 2.
>
> ✓ MRV systems must support forest monitoring besides carbon and consider other ecosystem services.
>
> ✓ MRV system should provide timely and appropriate feedback to policymakers on the effectiveness of REDD+ strategies to address the drivers of deforestation and degradation, and to promote positive incentives that reinforce conservation, sustainable management of forests and enhancement of forest carbon stocks.

Mexican MRV systems

Mexico's national MRV system will be a multifunctional instrument, serving as a guide for social, economic and environmental policies and providing information about other variables such as biodiversity. The MRV system will also support the monitoring of the REDD+ safeguards[7].

Currently, from the 3 main pillars of an MRV system, Mexico counts on a strong national forest inventory, has experience on Greenhouse Gas Inventories but is missing an operative satellite land monitoring system. It also has some data on historic deforestation that will require a review and improvements. Its institutional arrangements also require clearer definitions on the leading roles of each institution and how they can contribute, on the long-term, to the reinforcement of the different components of their MRV system.

A national scale MRV system in Mexico offers a valuable tested for a number of reasons:

i. The significant investment in a national forest inventory system which includes annual re-measurements in permanent sampling plots provides a clear opportunity to usefully blend remote sensed and ground data at a national scale, for at least 5 years and in a relatively short time.
ii. The national forest inventory is already providing value beyond carbon and is supported by an institutional architecture that ensures its continuity.
iii. The diversity of landscapes and biomes in Mexico can provide insights for a broad set of biological and environmental conditions.

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7 FCCC/AWGLCA/2009/17 http://unfccc.int/resource/docs/2009/awglca8/eng/17.pdf

iv. Significant experience in community monitoring, associated with the program of payment for environmental services, certified wood markets, voluntary carbon markets and others, creates a useful platform to enable rapid validation of proposed approaches.

v. Mexico provide further opportunities to validate simplified approaches at the community scale as well as to test approaches to ensure consistency across scales given its intention to seriously explore a nested approach in its REDD+ strategy.

Characteristics of the Mexican MRV system

✓ Mexico offers a test bed for methodologies and approaches providing relevant experience for other countries. It is well positioned to engage in regional cooperation and South-South capacity development.

✓ Mexico already counts on several operative MRV components. In order to advance in the road towards REDD+ implementation, a preliminary step will be to consolidate Tier 2 reporting for those already existing components.

✓ Mexico should prioritize the implementation of a national satellite monitoring system since the country already counts, unlike most non-Annex I countries, on a well developed national forest inventory.

✓ The Mexican national forest inventory needs to be improved towards a national carbon stock and carbon stock change measurements system.

✓ Due to its complex social framework, Mexico represents an excellent study-case to stimulate REDD+ endorsement at subnational and local levels. Mexico is already testing methodologies to support multiscale monitoring of its forests.

Components of an MRV system

1. Activity Data

To assess activity data (AD), Mexico needs to develop and implement an operative Satellite Land Monitoring System (SLMS) which will:

✓ Be operational. It will allow full territory coverage by high resolution satellite data with a seasonal temporal frequency of minimum of 2 revisits for each area unit, per year;
✓ Allow near-real time monitoring. It will enable the monitoring of forest disturbance processes in near-real time.
✓ Monitor land use changes in accordance with the forest definition that Mexico selects for REDD+.
✓ Detect land use changes (changes among different land uses categories) and forest canopy changes in forest land remaining forest land.
✓ Be consistent with the land stratification proposed for the National Forest Inventory.
✓ Be consistent with the evaluation of historic deforestation and degradation.

The main outputs of the SLMS in terms of reporting requirements will be (Figure 4):

✓ an annual land use change matrix, for reporting on land use changes processes.
✓ an annual conversion matrix, for reporting on changes in land practices between each land use sub-categories.

Figure 4: Example of a possible Mexico land use change matrix with forest conversions (forest land changing to other land uses and other land uses turning into forest) and activities that do not imply forest conversion (forest land remaining forest land)

Land use change matrix

Initial \ Final	FL Managed Evergreen Lowland Rainforests	FL Managed Dry Andean Forests	FL Managed Evergreen Andean Montane Forests	FL Unmanaged Evergreen Lowland Rainforests	FL Unmanaged Dry Andean Forests	FL Unmanaged Evergreen Andean Montane Forests	GL Managed Cattle pasture	GL Unmanaged Natural savannas	Crop Land	Wet Land	Settlement Land	Other Land	Final Area (T1)
FL Managed Evergreen Lowland Rainforests	51						15						61
FL Managed Dry Andean Forests		42					12						54
FL Managed Evergreen Andean Montane Forests			60										60
FL Unmanaged Evergreen Lowland Rainforests	25			50			35		13				123
FL Unmanaged Dry Andean Forests					26								26
FL Unmanaged Evergreen Andean Montane Forests						20	15						35
GL Managed Cattle pasture							10						10
GL Managed Natural savannas							2	10					12
Crop Land									29				29
Wet Land													0
Settlement Land											15		20
Other Land												5	5
Initial Area (T0)											15	5	460
Net change (A₀ to T1)											5	0	5

Forest activities data

Initial \ Final	Degraded Burning	Degraded Selective logging	Degraded Insect infestation	SMF	ECS (restoration)	ECS (afforestation/reforestation)	Conservation	...	Final Area
Degraded Burning	4								4
Degraded Selective logging		5	6						11
Degraded Insect infestation			2		4				6
SMF				1					1
ECS (restoration)					12				12
ECS (afforestation/reforestation)						15			15
Conservation							0		0
...									...
Initial Area	4	5	8	5	16	15	6	...	47
Net Change	0	5	-2	-4	-4	0	0	...	-4

Forest Land Evergreen Lowland Rainforests

2. Emission Factors

For the assessment of national forest emission factors (EF), a national forest inventory (NFI) is required. Mexico has already developed a well designed, periodically measured NFI. Among the priorities to support REDD+ implementation, Mexico needs to review the best post-stratification option that will lead to more homogeneous carbon categories, and that will consider different human practices, guaranteeing reduced national uncertainties. Moreover, the national forest inventory needs to be improved towards a national carbon stock and carbon stock change measurements system.

3. GHG Inventories
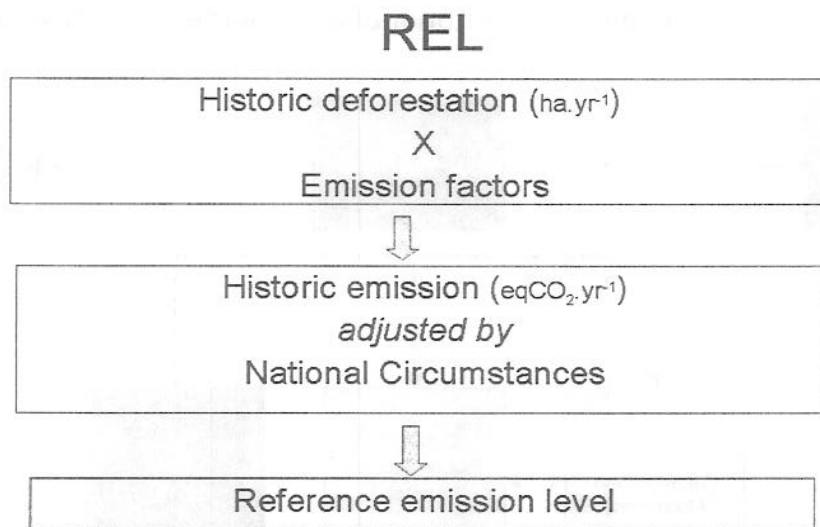
In order to estimate a country's contribution to global emissions, countries will have to compile a national GHG inventory. Mexico will establish a national GHG inventory office which will have the responsibility to submit country data to the UNFCCC Secretariat. Mexico's national GHG inventory will be constructed following the methodologies developed by the IPCC Guidelines. The initial

objective will be to report GHG estimates at Tier 2, but aiming at reaching Tier 3 in the medium-term.

A key function of the national GHG inventory office will be quality assurance and quality control (QA\QC) of data and methods. For this, the office will work as the national entity in charge of verifying data provided by the other two MRV components: the SLMS and the NFI. These functions will be carried out following IPCC guidelines on quality control (QC) and quality assurance (QA). In order to ensure the transparency of the entire MRV process, it is a good procedure to make GHG Inventory data publicly available through a web-based portal, and the changes in land uses accessible through a WEB-GIS system.

4. Reference Emission Levels and Reference Levels (REL/RL)

Mexico already counts on data of historic deforestation produced by INEGI for the 80´s, 90's and 2000's. However, these datasets need to be re-evaluated under the light of the UNFCCC reporting requirements since they are not based on comparable methodologies and their uncertainties are high. The rules to estimate REL and RL are currently inexistent. However, countries can already work on developing their historic maps of deforestation and degradation after defining their historic time periods of interest, and after debating about their national circumstances. Figure 5 shows the rational flow of activities to develop RELs.

REL

Historic deforestation (ha.yr⁻¹) X Emission factors

⇩

Historic emission (eqCO₂.yr⁻¹) adjusted by National Circumstances

⇩

Reference emission level

Figure 5: Flow chart of activities that countries can already start to develop to obtain their Reference Emission Level (REL) values.

5. Institutional arrangements

Mexico must define the authority responsible for ensuring that all technical and institutional arrangements related to REDD+ are implemented, including the preparation of the national GHG inventory (Figure 6). It will promote the development of the necessary technical capacity for establishing an MRV system and for the design and implementation of REDD+ related policies, measures and activities.

The selected authority will be the entity responsible for verifying the results of the REDD+ activities implemented at sub-national level and to quantify corresponding financial compensation. It further ensures that policies, measures and activities implemented for REDD+ respect relevant safeguards and are compliant with Mexico's development plans. Furthermore, this authority will determine the need of remedial actions, when undesired changes in land cover are detected, and will guide in the implementation of those actions.

To accomplish this institutional mission this authority will establish a technical service which will

have the mandate to control all forest-related activities being implemented on all the Mexican territory. The technical service will use a system based on satellite images with high frequency. Each unplanned change of land cover which will be detected by the satellite based system, will be then controlled on the ground by expert teams in order to assess changes and identify causes and actors.

Mexico's national MRV system will require the cooperation of a diversity of national institutions, whose competences must be clearly defined. These institutions will work in a collaborative manner but each of them will have a well defined role (Figure 6). Moving beyond forests and into the AFOLU sector, Mexico has advanced collaboration with the Ministry of Agriculture, Livestock, Rural Development, Fishing and Food (SAGARPA) to merge their land monitoring systems with data from the National Forest Inventory. It is expected that this collaboration will enable a much deeper coordination across programs and actions, resulting in a more sustainable land use at the local level.

All the three authorities will ensure the participation of local communities, NGOs, various agencies at national and international level and the private sector. The current expertise available in these three institutions needs to be improved. The three institutions will be enabled to establish a MRV system through capacity building actions.

Potential scheme of institutional arrangements in Mexico
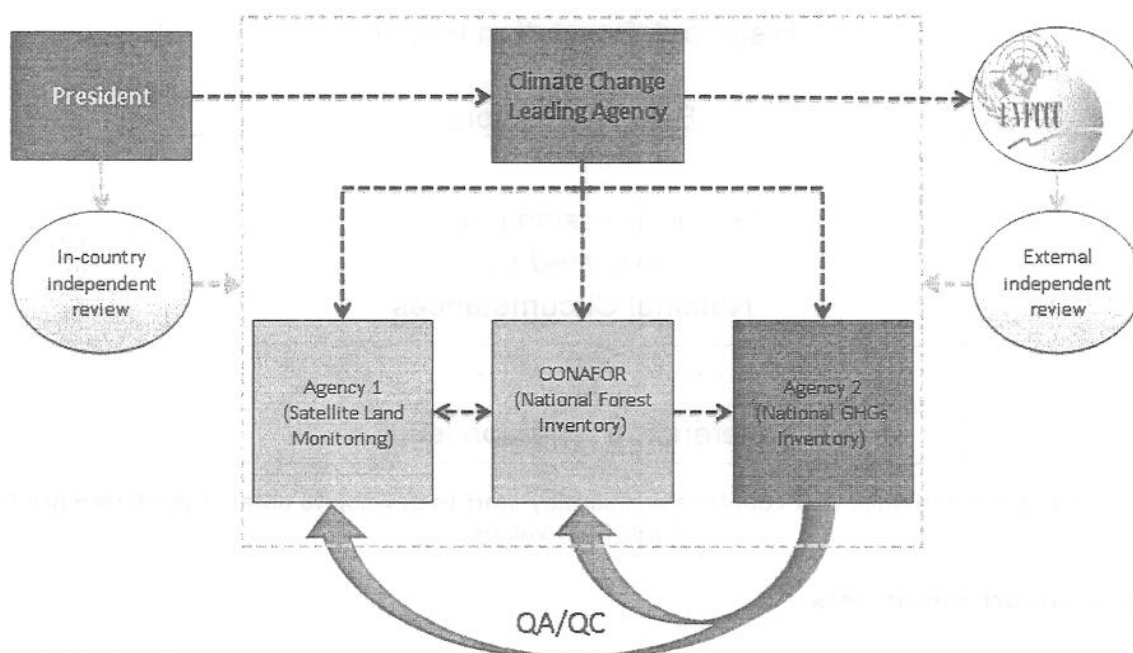
Figure 6: Example of institutional arrangement to implement an MRV system in Mexico to elaborate GHG estimates of Mexico's forests. Mexico needs to decide who are Agencies 1 and 2 as well as who is the Climate Change Leading Agency.

The role of Norway-Mexico cooperation

Developing and implementing MRV systems for forests in developing countries is a complex enterprise, and it requires international cooperation for the development of its components to provide technical and expertise, transfer or technologies and financial support. This global effort will be particularly important to ensure compatibility of emerging systems with emerging standards and platforms.

Mexico has been actively engaged in major multilateral initiatives related to MRV for REDD+ (i.e. UN-REDD, the FCPF, the Global Earth Observations Forest Carbon Tracking initiative (GEO-FCT)). In addition, Mexico has developed significant bilateral work such as joint work on the carbon budget model with Canada, technical experience on the use of radar technologies with Germany, enhancement of forest inventory work with the US and Finland, among others.

In spite of these initiatives, this cooperation initiative with Norway will avoid overlapping with other activities by creating a centralized national coordination team for REDD+ which will be constituted by MRV specialists funded under this Norwegian-Mexican project. Considering the fundamental role of the Norwegian-Mexican initiative in the overall MRV work in Mexico, it will serve as the coordinating platform for all other MRV work, ensuring that efforts are not duplicated, and that they are synergic and complementary. This complementarity includes the following initiatives: i) MRV activities under the Word-Bank FCPF, ii) MRV modules in pilot areas under AFD initiative and iii) Community monitoring under USAID initiatives.

The Norwegian Ministry of Foreign Affairs shares with Mexico the need for practical experiences of robust MRV systems as part of the ultimate REDD+ regime. Technical and financial support from Norway will enable Mexico to accelerate development of its own MRV system as well as to enable stronger dissemination of lessons learned.

Besides these pillar MRV activities, this Mexican-Norwegian cooperation will also focus on other REDD+ Readiness activities in Mexico such as the reinforcement of co-benefits, stakeholder engagement, reference scenarios, or the management of Readiness. Moreover, through this cooperation initiative, the Norwegian Ministry of Foreign Affairs will also support the promotion of Mexico as a centre of excellence for South-South cooperation to exchange experiences and capacities on MRV systems and REDD+ implementation, and will also support research on the characterization of local financial incentives for REDD+ funding, through experiences and case studies in Mexico.

The UN-REDD Programme

The UN-REDD Programme (www.un-redd.org) is a collaborative partnership between FAO, UNDP and UNEP. At the national level, the UN-REDD Programme supports developing countries in the implementation of REDD+ strategies, guided by the principles of country ownership and the United Nations human rights-based approach, and with a strong focus on engagement of all stakeholders, including Indigenous Peoples' and civil society organizations.

Mexico was accepted as a partner country in February 2010 and participated as an observer at the UN-REDD Policy Board meeting held in Nairobi, Kenya in March 2010.

Although not formally involving the UNREDD programme, Norway and Mexico have agreed to call upon the support of UNDP and FAO to jointly provide administrative and technical assistance to the project.

Project Strategy

The three lines of action described in this proposal include short, mid and long-term activities that will help prioritize resources and will facilitate monitoring the logical evolution of the project.

1.Short-term actions

1.1 Outcome 1: designing and implementing an MRV system
This outcome will initiate with a country diagnostic to institutionalize Tier 2. Mexico has firmly advanced in their MRV system but it is important for the institutions to review what is currently

available in terms of MRV and what is required to accelerate the development and implementation of its components to support REDD+ reporting under Tier 2 or beyond, to guarantee that Mexico will be in a competitive position as soon as the new post-2012 regime starts.

The diagnosis will include all the steps mentioned in the Mexican REDD+-readiness, and described in the Result Framework section. Figure 7 shows a summarized version of this information. In red colour appears the MRV component currently missing in Mexico. In blue those elements that require the shortest-term attention.

1.2. Outcome 2: Regional cooperation and South-South capacity building

The above mentioned activities, which are meant to consolidate Tier 2 reporting, will come along with a thorough documentation of the methodologies, approaches, and lessons learned, in order to share and transfer knowledge. These documents will disseminate the "know-how" and the lessons learned in Mexico to facilitate other countries on their road towards Tier 2. Documenting these experiences may provide useful insights for other countries and can further contribute to the design of progressive approaches.

1.3. Outcome 3: Characterization of local incentives

Activities under outcome 3 are already running. Its short term strategy considers the publication of a revised summary on the research done on existing locally adapted incentive systems for REDD+ in Mexico.

Analysis of key definitions (what is a forest?, which REDD+ activities for Mexico?)

Characterization of the current status of the Mexican MRV system:
-Key forest emission and absorption categories: **prioritizing pools & actions.**

-Designing a MRV system for general forest monitoring: carbon, co-benefits, and safeguards. Synergizing with biodiversity and water services
Minimizing leackage and maximizing permanence

-Emission Factors- National Forest Inventory: consolidating Tier 2.
Completeness, transparency, consistency, comparability, accuracy
Reducing accuracies. Reviewing QC/QA.
Emission Factors for REDD+; land stratification.

-Activity data- Operative Satellite Monitoring System: achieving Tier 2.
Developing a OSMS for Mexico that facilitates REDD+ monitoring
Spatial identification of REDD+ selected activities.
Land stratification matching the NFI stratification.
Improved consistency and transparency for historic deforestation

-National Greenhouse Gas Inventory: achieving and consolidating Tier 2.
Completeness, transparency, consistency, comparability, accuracy
Current reporting Tiers for GHG inventories?
Development of a national GHG archive: **follow up of all**
methodologies, datasets, QC/QA, institutional participation, etc.

(Outcome 1: MRV system)

Figure 7: summary of short-term actions planned for Outcome 1. Activities mainly concentrate to consolidate Tier 2 reporting in Mexico

2. Medium term actions

2.1 Outcome 1: designing and implementing an MRV system

2.1.1. A key medium term goal of this project is to move Mexico towards its second REDD+ implementation phase, which would require 1 year of data on land use changes + conservative estimates of carbon emissions. From these two requisites, Mexico already counts on the carbon emission data but is missing the operative satellite monitoring system.

Moving to the second REDD+ implementation phase means having a pre-operative system that would allow Mexico access predictable funds. To reach this phase, Mexico will have to develop and implement a satellite monitoring systems that supports annual monitoring on land use changes and that has enough resolution to support REDD+ activities such as degradation. This system must be designed to minimize uncertainties through well organized ground truthing data validations. Ideally, the activity data should be offered in a transparent, free and easily accessible platform.
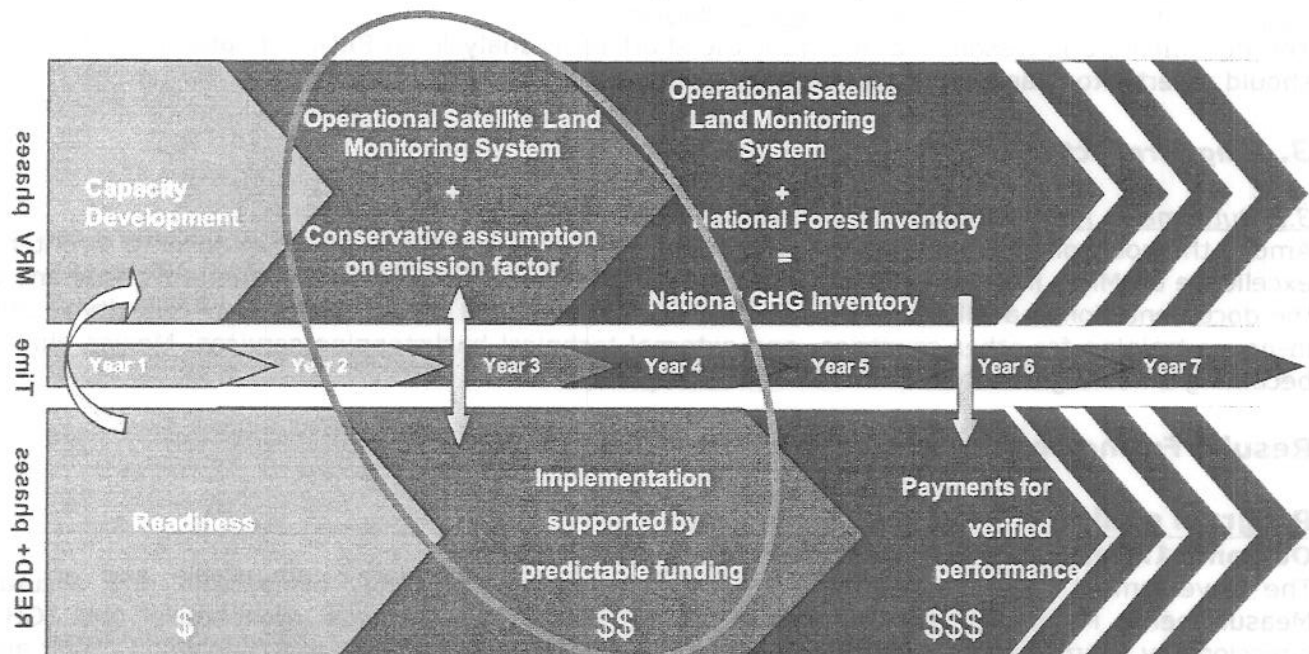
Figure 8: Medium term goal to position Mexico on the second REDD+ implementation phase.

2.1.2. Another MRV medium-term goal refers to the research and development of multiscale MRV methodologies that improve subnational monitoring. Reporting on GHG emissions is at national level only, therefore, all MRV multiscale efforts will help improve national reporting by reducing uncertainties at subnational/regional/local levels. MRV multiscale systems will support countries to have better control over their resources and will support community endorsement on the country's conservation goals. However, community measurement and monitoring are not a requirement for reporting on REDD+. Countries will decide how REDD+ financing gets redistributed subnationally.

Practicality and feasibility of proposed technical requirements for MRV systems for REDD+ may become a barrier to the negotiations and also for performance-based payments. In particular, there is a concern that if the technical requirements and cost of measuring and monitoring carbon increases, this may impede rapid action to curb deforestation and reduce the benefits of REDD+ altogether. It is necessary to develop methodologies and approaches that enable a cost-effective, progressive approach that credibly enables rapid action while allowing countries to gradually increase the accuracy of their carbon assessments. In this regard, there is a need to rapidly develop practical experience in nationally integrated approaches to measure and monitor carbon at various scales and assess the costs and benefits of increasing their sophistication and complexity. This could be a significant contribution to the international negotiations on REDD+ by allowing REDD+ countries to make more informed decisions.

2.1.3 Once Mexico has consolidated its Tier 2 reporting, and as soon as the reporting becomes complete, transparent, comparable, consistent and as much accurate as possible (or parallel to this process), Mexico will move forward by researching on Tier 3 modeling. The Canadian CBM-CFS3 carbon model will be tested in Mexico using a combination of ground and satellite data to parametrize all Mexican ecosystems types. Moreover, in order to minimize field measurement costs, Mexico will work on the development of soil carbon models for each forest type. The parameterization of these models require at least one year of multi-temporal data on litter dynamics, as well as aboveground carbon stock dynamics.

2.2 Outcome 2: Regional cooperation and South-South capacity building
Results from the Project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums facilitated.

2.3. Outcome 3: Characterization of local incentives
The documents and lessons learned from the short-term analysis on REDD+ financial mechanisms, should revert into changes in national policies and institutional adjustments.

3. Long term actions

3.2 Outcome 2: Regional cooperation and South-South capacity building
Among the goals of the South-South cooperation is the empowering of Mexico to become a center of excellence on MRV, in Latin America. Once the implementation of the MRV system advances and all the documentation is available and disseminated, Mexico would like to reinforce its capacity to offer in-house training for other countries, and external technical backstopping services. Mexico aims at becoming a neuralgic center for South-South cooperation.

Results Framework

Program goals

> **Outcome 1: Designing and implementing an MRV system**
> The development and implementation of a transparent, complete, comparable and accurate Measurement, Monitoring and Reporting (MRV) System to estimate greenhouse gas (GHG) emissions by sources and removals of forest sinks, forests carbon stocks and changes in forest area changes, as part of the ultimate REDD+ regime.

This outcome will be supported by the following activities (FAO supported):
1. Ensuring project coherence and consistency
   a. The creation of an Advisory Group to guarantee technical consistency and navigate project

2. Country diagnosis and key orientations for MRV system for AFOLU sector & REDD+:
   a. Characterization of current status of MRV system
   b. Analysis of key definitional issues

3. Improved Emission factors: National Forest Inventory (NFI):
   a. Achieving and consolidating Tier 2 reporting
   b. Estimating REDD+ emission factors
   c. Towards Tier 3 reporting

4. Improved Activity Data: Satellite operative forest monitoring system
   a. Achieving and consolidating Tier 2 reporting
   b. Continuous and near-real time assessment of land uses and land use changes.
   c. Develop and implement platform to access activity data

5. Improved National forest GHG inventories to estimate   emission from sources and absorptions by sinks for the AFOLU sector
    a. Achieving and consolidating Tier 2 reporting
    b. Develop an archive of the GHG Inventories

6. Ensuring consistency between RL/REL and the operative MRV system.
    a. Estimating Reference Emission Levels and Reference Levels

7. MRV multi-scale research: linking national, state, and local scales
    a. Develop methodologies to implement consistent MRV systems among scales

8. Ensuring adequate and stable institutional arrangements for operation of MRV system
    a. Institutional platform to coordinate MRV national system and REDD+ implementation
    b. Design and develop a National REDD+ registry

9. Developing and implementing links of MRV systems with other non-carbon environmental monitoring efforts
    a. Tools and platforms to report on carbon and other environmental aspects

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Outcome 2: Regional cooperation and South-South capacity building
The promotion of Mexico as a centre of excellence for South-South cooperation to exchange experiences and capacities on MRV systems and REDD+ implementation.

This outcome will be supported by the following activities (UNDP supported):

10. Promoting common approaches and South-South cooperation
    a. Results and lessons learned documented and disseminated with other countries

11. Enhancing capacity to operate MRV system
    a. Related to emission factors
    b. Related to activity data
    c. Capacity building for GHG Inventory & REDD+
    d. Enhancing Reporting capacity
    e. Capacity building for multiscale MRV implementation

12. Enhancing policy design for REDD+
    a. Design and management of locally adapted incentive systems for REDD+
    b. Link national policies to REDD+ monitoring efforts

Outcome 3: Characterization of local incentives: research on REDD+ funding through experiences and case studies in Mexico

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13. Design and management of locally adapted incentive systems for REDD+
    a. Lessons learned from existing mechanisms employed in Mexico
    b. Development of proposals to adapt and/or design incentive systems for REDD+

14. Link national policies to REDD+ monitoring efforts
    a. Develop REDD+ related policy maps and identify requirements to ensure consistent future monitoring.
    b. Identify links to national systems to monitor relevant programs and policies

Table 2. Results Framework

Outcome 1: Designing and implementing an MRV system *

Project Outputs	Intermediate outputs	Managing UN Org.	Participating UN Org.	Implementing Partner	Indicative activities for each Output	Budget (in USD) Year 1	Year 2	Year 3
Ensuring project coherence and consistency	Creation of an Advisory Group to guarantee technical consistency and navigate project	UNDP	FAO	CONAFOR	Support communications and periodic meetings of steering committee members.	44000	44000	44000
Country diagnosis and key orientations for MRV system for AFOLU sector & REDD+	Characterization of current status of MRV system	UNDP	FAO	CONAFOR	Identification of key categories: main forest categories of emission and absorption.	5000		
					Mapping of current multiscale Institutional, legal and administrative arrangements for MRV and REDD+. In addition, mapping of other readiness activities, including research efforts.	20000		
					Identification and characterization of relevant data, tools and systems, including those related to co-benefits and safeguards	30000		
	Analysis of key definitional issues	UNDP	FAO	CONAFOR	Implications of different forest definitions (e.g. FAO, Kyoto Protocol, Mexican legislation) for REDD+ implementation. Definition of deforestation and degradation in Mexico.	10000		
					Country definitions of REDD+ activities	30000		

					Outcome 1: Designing and implementing an MRV system *			
						Budget (in USD)		
Project Outputs	Intermediate outputs	Managing UN Org.	Particip ating UN Org.	Implement ing Partner	Indicative activities for each Output	Year 1	Year 2	Year 3
Improved Emission factors: National Forest Inventory (NFI)	Achieving and consolidating Tier 2 reporting	UNDP	FAO	CONAFOR	Assessment and improvement of methodologies applied in Mexico, which include: i) Assessment of current NFI methodological approaches employed to sample carbon stocks and identification of missing forest carbon pools, including consideration of the integration with multiple scale methodologies. ii) Assessment of current methodologies to estimate carbon stocks: country specific allometric equations at different scales (species, forest types, ecosystem, etc). Evaluation of country specific expansion factors. iii) Assessment of methods for estimation of Emission Factors currently employed: evaluating methodologies to identify carbon stocks changes (default IPCC versus country defined methodologies) iv) Updating QA/QC procedures for Emission Factors to reduce uncertainties and improving institutional coordination	300000 (all Tier 2 activities)		
	Estimating REDD+ emission factors	UNDP	FAO	CONAFOR	Identification of REDD+ principal activities in Mexico: evaluation of methodologies to estimate emission factors associated to REDD+ (e.g. combined data from forest concessions, from logging companies, from censal data, etc). Reinforcing field sampling to estimate EF for REDD+	550000	150000	
					Land (pre/post) stratification (appropriate categories for carbon strata) to estimate emission factors from REDD+	300000	50000	

Outcome 1: Designing and implementing an MRV system *

Project Outputs	Intermediate outputs	Managing UN Org.	Participating UN Org.	Implementing Partner	Indicative activities for each Output	Budget (in USD) Year 1	Year 2	Year 3
Improved Activity Data: Satellite operative forest monitoring system	Towards Tier 3 reporting	UNDP	FAO	CONAFOR	Evaluation of the Canadian CBM-CFS3 model for Tier 3 reporting in Mexico: establishment and data collection in experimental plots (10 strategic landscapes)	530000	400000	100000
					Assessment of current modelling equations for soil carbon dynamics	10000	10000	
	Achieving and consolidating Tier 2 reporting	UNDP	FAO	CONAFOR	Evaluation of methodological approaches to sample land use changes and propose improvements (e.g. FRA-JRC: segmentation versus NDVI). Short-term versus long-term change detection.			
					Spatially explicit identification of REDD+ activities, and related drivers, (i.e. fire) in Mexico: evaluation of methodologies to spatially identify REDD+ activities (e.g. intact forest approach to identify degradation).			
					Applying land stratification (appropriate categories for carbon strata)to estimate Activity Data: potentials and limitations when linking land stratification for activity data and emission factors	200000 (for all Tier 2 activities)		
					Considerations of leakage and permanence for activity data analysis and subnational reporting areas			
					QA/QC for activity data: reducing uncertainties and improving institutional coordination, including accuracy and precision assessment of AFOLU & REDD+ products derived from satellite imagery			

Outcome 1: Designing and implementing an MRV system *

Project Outputs	Intermediate outputs	Managing UN Org.	Particip ating UN Org.	Implement ing Partner	Indicative activities for each Output	Budget (in USD)		
						Year 1	Year 2	Year 3
Improved National forest GHG inventories to estimate emission from sources and absorptions by sinks for the AFOLU sector	Continuous and near-real time assessment of land uses and land use changes	UNDP	FAO	CONABIO/ CONAFOR	Annual information of forest land uses and forest land use changes for national scales, three pilot States and some pilot areas, including vegetation mapping with appropriate categories for carbon strata	500000	500000	350000
					Ground validation of AFOLU products derived from satellite imagery	150000	150000	50000
	Develop and implement platform to access activity data	UNDP	FAO	CONAFOR	Implementation of an operational web-based, freely accessible platform to report on national/subnational land use changes and land uses.	250000	75000	50000
					Development of easily accessible visualization tools for results.			
	Achieving and consolidating Tier 2 reporting	UNDP	FAO	CONAFOR	Evaluation of the quality of data and Reporting tier levels of available GHG Inventories in Mexico. Adjustment to UNFCCC reporting requirements: transparency, coherence, comparability, completeness, accuracy.	50000		
					QA/QC for national forest GHG inventory focusing on AFOLU sector: reducing uncertainties and improving institutional coordination	200000	100000	100000
	Develop an archive of the GHG Inventories	UNDP	FAO	CONAFOR	Develop a documented national database of emission factors for the AFOLU sector & REDD+ activities	15000	10000	5000
					Develop a documented national database of activity data for the AFOLU sector & REDD+ activities	15000	10000	5000

Outcome 1: Designing and implementing an MRV system *

Project Outputs	Intermediate outputs	Managing UN Org.	Particip ating UN Org.	Implement ing Partner	Indicative activities for each Output	Budget (in USD)		
						Year 1	Year 2	Year 3
Ensuring consistency between RL/REL considerations into MRV system.	Defining Reference Emission Levels and Reference Levels	UNDP	FAO	CONAFOR	Development of a national and subnational statistical annual-biannual database for activity data	10000	5000	5000
					Estimate historic deforestation and degradation rates and activities related to the +, for Mexico for the country's selected historic period:			
					i) Define needs to link the available past datasets: standardization processes, reassigning of land categories, redefinition of scales, etc.	350000 (for i, ii and iii activities)		
					ii) Compare the available datasets with other datasets (i.e. FRA) and evaluate optimum methodology for reporting REL/RL under the UNFCCC			
					iii) Evaluating historic degradation through National Forest Inventory Data			
					Merge the historic activity data + emission factors for each forest unit to obtain an initial reference value. Considerations about subnational REL estimations and consistency among scales.	50000	50000	50000
					Debate about the National Circumstances and organize subnational workshops to discuss subnational REL/RL	350000	50000	
MRV multi-scale research: linking national, state, and local scales	Develop methodologies to implement consistent MRV systems among scales	UNDP	FAO	CONAFOR	Evaluate different methodologies to implement MRV at local and state scales, including optimal allocation studies. Develop protocols for integrated national, subnational and project level MRV systems.	10000	10000	

Outcome 1: Designing and implementing an MRV system *

Project Outputs	Intermediate outputs	Managing UN Org.	Particip ating UN Org.	Implement ing Partner	Indicative activities for each Output	Budget (in USD)		
						Year 1	Year 2	Year 3
Ensuring adequate and stable institutional arrangements for operation of MRV system	Institutional platform to coordinate MRV national system and REDD+ implementation	UNDP	FAO	CONAFOR	Apply and validate protocols in pilot sites (community Monitoring): extend to broader additional pilot areas.	1500000	1000000	300000
					Identify needs associated to multi-scale integration: Design and undertake additional sampling efforts, parametrization and implementation of multi-scale models, etc.	100000	100000	100000
					Evaluating the implications of implementing REDD+ for current and future arrangements for the National GHG Inventory & MRV systems	50000	50000	20000
	Design and develop a National REDD+ registry	UNDP	FAO	CONAFOR	Develop operational proposal for the National REDD+ registry, including assessment of implications of implementing REDD+ for future development of the National Registry as committed in PECC	175779.81	50000	50000
Developing and implementing links of MRV systems with other non-carbon environmental monitoring efforts	Tools and platforms to report on carbon and other environmental aspects	UNDP	FAO	CONABIO/ CONAFOR	Investigate potential synergies between carbon MRV systems and MRV for other non-carbon environmental services (e.g. water, biodiversity, etc)	40000	40000	
					Identification of data, tools and platforms to integrate monitoring of social and environmental aspects, including drivers of deforestation and degradation	100000	50000	50000
Total Outcome 1						5,944,779.81	2,904,000	1,279,000

* Outcome 1 will be technically led by FAO in order to support CONAFOR's implementation. Nevertheless, the budget management will be implemented by UNDP.

Outcome 2: Regional cooperation and South-South capacity building

Project Outputs	Intermediate outputs	Implementing UN Organization	Part. UN Org.	Imp. Partner	Indicative activities for each Output	Budget (in USD)		
						Year 1	Year 2	Year 3
Promoting common approaches and South-South cooperation	Results and lessons learned documented and disseminated with other countries	UNDP	UNDP	CONAFOR	Documenting lessons learned	50000	30000	50000
					Presentation of MRV system and its results to relevant national and state stakeholders	30000	60000	60000
					Identify and engage in bilateral and multilateral cooperation activities	50000	100000	100000
Enhancing capacity to operate MRV system	Related to emission factors	UNDP	UNDP	CONAFOR	Development of training materials and organizing national workshops to train subnational entities on MRV	20000	20000	
					Expansion of existing infrastructure (targeted laboratory expansions)	537000	50000	50000
					Specialized training for personnel in key MRV components.	25000	10000	
	Related to activity data	UNDP	UNDP	CONAFOR	Expand capacity for long term operation and storage of system (processing)	200000	200000	
					Integration of forest management statistics, including production and inspection.	50000	50000	
	Capacity building for GHG Inventory & REDD+	UNDP	UNDP	CONAFOR	Expansion of existing capacity to analyze collected data on Emission Factors and Activity Data to prepare forest related GHG Inventories	20000	20000	
	Enhancing Reporting capacity	UNDP	UNDP	CONAFOR	Requirements for REDD+ reporting under the Convention: capacity building for REDD+ reporting of emissions/absorptions	5580	5000	
	Capacity building for multiscale MRV implementation	UNDP	UNDP	CONAFOR	Develop training materials for the protocols as well as capacity training at different scales.	20000	20000	

Project Outputs	Intermediate outputs	Impl. UN Organization	Part. UN Org.	Imp. Partner	Indicative activities for each Output	Year 1	Year 2	Year 3
Identifying short and long-term MRV goals: COP and beyond	Short-term: COP events on MRV	UNDP	UNDP	CONAFOR	Panorama of Mexico´s MRV bottom up, and down-to-bottom approaches: the merging of two complementary forces.			
	Long-term: national implementation of MRV systems, REDD+ and beyond REDD+	UNDP	UNDP	CONAFOR	Prioritization of long-term activities. Analysis of risks.	150000		
					Identification of new areas of research, and further goals for improved MRV systems			
Total Outcome 2						1157580	565,000	260,000

Outcome 3: Characterization of local incentives: research on REDD+ funding through experiences and case studies in Mexico

Project Outputs	Intermediate outputs	Impl. UN Organization	Part. UN Org.	Imp. Partner	Indicative activities for each Output	Budget (in USD)		
						Year 1	Year 2	Year 3
Evaluating experiences and case studies to design local incentives	Design and management of locally adapted incentive systems for REDD+	UNDP	UNDP	CONAFOR	Lessons learned from existing mechanisms employed in Mexico		30000	100000
					Development of proposals to adapt and/or design incentive systems for REDD+	30000	60000	60000
	Link national policies to REDD+ monitoring efforts	UNDP	UNDP	CONAFOR	Develop REDD+ related policy maps and identify requirements to ensure consistent future monitoring.	40000	40000	40000
					Identify links to national systems to monitor relevant programs and policies	10000	10000	10000
Total Outcome 3						80,000	140000	210,000

Outcome 4: Project Management

Project Outputs	Intermediate outputs	Impl. UN Organization	Part. UN Org.	Imp. Partner	Indicative activities for each Output	Budget (In USD)		
						Year 1	Year 2	Year 3
		UNDP	UNDP	CONAFOR	Coordinator	85500	85500	85500
					Travel & Logistic	20300	17000	17000

	FAO	FAO	CONAFOR	Technical MRV expert team (salaries, logistics, DSA)			
					612159.8	475052.3	412787.9
Total Outcome 4							
					717959.8	577552.3	515287.9
TOTAL PROJECT							
					7900319.61	4186552.30	2264287.90

Budget summary (in USD)

	PNUD	FAO	TOTAL
Project Budget	12,851,159.81	1,500,000.00	14,351,159.81
GMS	899,581.19	105,000.00	1,004,581.19
Budget managed by Agency	13,660,741.00	1,605,000.00	15,355,741.00

Budget is expressed in USD. The sum needed for the project is estimated to USD 15,355,741. The Norwegian contribution is expected to amount to approximately USD 15,355,741
*Resource allocation may be agreed at either output or indicative activity level.

Acquisition plan

Most of the activities presented in the previous results framework will require the coordination with other national institutions and organizations who will act in the project as Responsible Parties. In the frame of previous cooperation and searching to maximize efficiency and funding, CONAFOR could ask for support of these Responsible Parties to develop the different outcomes established in the Project This support will be established, under clearly developed Terms of References and/or Memorandums of Understanding.

UNDP will provide the administrative and financial platform in order to provide the resources needed to develop the activities requested by CONAFOR to the Responsible Parties. This also will be established in the particular MoUs.

The following paragraph describes potential interactions between CONAFOR and other governmental institutions, as well as with consultancy firms, and UN agencies. These interactions are hereby described foreseeing the possibility of establishing the needed arrangements:

CONAFOR-CONABIO: CONAFOR foresees the possibility of directly cooperating with CONABIO through the development of MoUs. The activities to delegate are still to be detailed but they would mainly refer to receiving support on the Operative Satellite Monitoring System, as well as issues on links of MRV systems with other non-carbon environmental monitoring efforts.

CONAFOR-CLIMATE FOCUS: CONAFOR has a long history of cooperation with the consultancy Climate Focus, which for the history and importance of their close contribution to CONAFOR's projects and goals could be considered as a strategic partner, in particular, through their expertise in financial mechanisms, REDD+ under a nested approach and their deep understanding of REDD+ architecture under the negotiations. The modality of cooperation is still to be defined and could either be an agreement through a MoU or through its participation as strategic partner. Climate Focus role will mainly focus on Outcome 3: Characterization of local incentives: research on REDD+ funding through experiences and case studies in Mexico, although their support could be required for other activities, if necessary.

CONAFOR-COLPOS-ECOSUR: CONAFOR could consider asking support from COLPOS and/or ECOSUR researchers to move forward in the methodological development of MRV multiscale approaches that aid the linking between national and subnational scales.

CONAFOR-INE: CONAFOR could consider the development of a MoU with INE to advance in the identification of gaps and limitations associated to the current national Greenhouse Gas Inventories. INE is currently in charge of the GHG inventories. A review of the key categories of absorption and emission is fundamental to prioritize action to improve Tier 2 reporting.

CONAFOR-INEGI: CONAFOR might consider establishing a closer cooperation with INE when developing tools to evaluate the country REL/RL. Other cartographic products might require a closer cooperation with this institution.

CONAFOR-FAO: FAO will directly receive its funds through UNDP in order to technically backstop and assist the MRV system design and implementation, and to support the creation of a national team of experts that will help develop the appropriate institutional capacity, not only for CONAFOR but for the other involved agencies as well. CONABIO, INE, SEMARNAT, INEGI.

Management and Coordination Arrangements

The National Implementing Partner (NIP) of this Project will be the National Forestry Commission (CONAFOR). A National Implementation Management approach (NIM) will be used to run the Project, with support, technical advice and supervision of the participating UN Agencies.

The UNDP and the Norwegian Ministry of Foreign Affairs will enter into an agreement which outlines the Norwegian commitments as a donor. The UNDP Cost-Sharing agreement outlines the details of such commitment; the UNDP Project Document serves to address the, inputs, management arrangements and commitments, and the outputs with the implementing agent.

The UN management arrangements will be described in a separate agreement (attached) which will define the administrative and financial conditions and interaction between FAO and UNDP.

UNDP will apply the guidelines and regulations contained in the Management Guide for NIM-Mexico UNDP and its subsequent updates.

There will be three main components in the structure for the project implementation, namely Project Board (PB), Technical Advisor Committee (TAC) and Project Management Unit (PMU).

Roles and Responsibilities

Project Board (PB)

A Project Board (PB) will be established to provide oversight and strategic guidance to the Project. Members include Mexican government representatives of the National Implementing Partner (CONAFOR), representatives of the UN participating Agencies (FAO and UNDP) and a representative of the Norwegian Ministry of Foreign Affairs (as donor) in condition of observer. Other key-development partners involved in REDD+ could be invited to the PB as observer.

The Committee shall be responsible for providing oversight of the fund-supported activities, overall coordination of the project and be responsible for making arrangements for assurance function. The responsibilities of the PB shall include, but not be limited to:

1) Review, approve and amend this project document, including the Monitoring and Evaluation (M&E) framework, and the implementation plan;
2) Monitor compliance with the Project's objectives;

3) Clear ToRs and approve the contract of the Project Manager and Project Component Coordinators.
4) Discuss progress and identify solutions to problems facing any of the project´s partners;
5) Review and approve the AWP and the consolidated financial and progress reports;
6) During the life of the project, review proposals for major budget re-allocation such as major savings or cost increases, or for use of funds for significantly different activities.
7) Review evaluation findings related to impact, effectiveness and the sustainability of the project.
8) Prepare, focus on, or redesign the project's strategy;
9) Monitor both the budget and the prompt delivery of financial, human and technical inputs to comply with the work plan;
10) Ensure the participation and ownership of stakeholders in achieving the objectives of the project.
11) Ensuring communication of the project and its objectives to stakeholders and the public;
12) Coordinate with other REDD+ related initiatives at policy level
13) Approving the project communication strategy and public information plans prepared by the PMU
14) Facilitating linkages with high-level decision making.
15) Convene ordinary meetings to consider the Technical Committee's proposals and recommendations, as well as the progress made by the project;
16) Convene, if necessary, extraordinary meetings;

The PB provides operational coordination to the project planning and implementation of activities. It is the mechanism for a more operative coordination, monitoring and decision making of the project.

The PB meets quarterly, but may have to meet more often depending on the need to address issues related directly to management and implementation of the project.

Technical Advisory Committee (TAC)

On as needed basis, a Technical Advisory Committee may be created. This is anticipated for the MRV component.

The TAC is a technical advisory and consulting body whose main function is to ensure full and successful compliance of all or part of the project's objectives. Its principal functions are to:

- ✓ Ensure the project provides good results;
- ✓ Guarantee that the parties involved will help to achieve the project´s objectives and will adopt them;
- ✓ Support the project in the management of the knowledge within the framework of the activities stipulated in the work plan;
- ✓ Revise the work plan and progress reports to provide technical inputs and sound practices (national and international) that will help to meet the project's objectives.
- ✓ Revise the project's results and supplement them with each member's technical expertise;
- ✓ Identify consultants and experts on the theme, both national and international, for the implementation of the project;
- ✓ Analyze or, if necessary, solve problems concerning the project's progress to follow up on the work plan and comply with the performance indicators; and
- ✓ Promote synergies between potential stakeholders, and mobilize resources to broaden the project's impact.

The TAC will also coordinate with other initiatives and agencies on technical matters related to REDD+. As per identified needs, other agencies and institutions can be invited to discuss technical issues and share lessons learned.

The TAC for MRV shall be formed with the following composition:

- 3 Mexican members that may be selected from academia, private sector, indigenous communities, NGOs and government institutions[8].
- 3 international experts representing various international processes and key country experts[9]

The selection of the TAC members shall be made jointly by Norway and Mexico.

A National Project Director (Focal point)

A National Project Director (NPD) will be appointed by the GoM (CONAFOR) to be the focal point of the project implementation. The NPD will carry overall accountability on behalf of the GoM and will report to the PB on progress made and issues to be resolved.

The NPD will oversee the project and carries overall responsibility and accountability on behalf of the GoM for the project to the PB. She/he will establish and provide overall guidance to the Project Management Unit (PMU), and supervise directly to the Project Manager and organizational structure of the PMU.

The NPD is responsible for overseeing and approving the work undertaken by the Project Manager and the team. The NPD will submit relevant documentation to the PB for endorsement.

Project Management Unit (PMU)

At the management level, a Project Management Unit (PMU) will be created. This entity will be responsible for the overall operational and financial management and reporting of the donor in accordance with the rule and regulations of the Managing Agent.

The PMU will manage day-to-day operations of the Project, and will be based at CONAFOR. The PMU will be responsible for the overall day to day operational and financial activities, developing the AWPs, progress reports, M&E framework under supervision of the MA, in close coordination with the National Implementing Partner and key-stakeholders.

The PMU will also be responsible for preparing a work plan and covering activities and inputs under the Participating UN Agencies and CONAFOR. The quarterly progress reports will be prepared on activities and detailed expenditures, disaggregated by the responsible participating UN Agency following the rules and procedures established by the Managing Agent.

The AWP will be accompanied by a budget table, disaggregated by the responsible Participating UN Agency. It will also include the identification of specific procurement and recruitment activities to be undertaken by the Participating UN Agencies. The AWP and budget will be reviewed and agreed by the PB.

The PMU will be leaded by a Project Manager (NPM) and supported by the required professional staff that may include: 1) An administrative assistant, 2) Coordinators for each midterm outcome,

Project Manager (PM)

A Project Manager will be recruited to ensure smooth implementation of the project on a daily basis. The PM will be accountable for implementation of all activities of the project. This position will

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[8] Potential members for the MRV TAC include: Dr. Gerardo Bocco, UNAM or Dr. Omar Masera, UNAM, Dr. Adrian Fernandez, INE, Dra. Julia Carabias, Natura, Representative from communities in Scolel Té or SAO.

[9] Suggested members for the MRV TAC could include: Dr. Danilo Mollicone, FAO UN REDD, Dr. Alex Held, GEO-FCT, Dr. Werner Kurtz, NRCan, Dr. Martin Herold, GOFC-GOLD, Dr. Thelma Krug, INPE,

require outstanding management skills and experience, and thorough knowledge of both the UN and GoM rules and regulations.

The PM is the responsible to support CONAFOR to achieve the project goals on time by providing administrative and coordination inputs for project activities. The PM will also be responsible for preparing a work plan and covering activities and inputs under the Participating UN Agencies and CONAFOR. The quarterly progress reports will be prepared on activities and detailed expenditures, disaggregated by the participating UN Agencies following the rules and procedures established by the Managing Agent. The deliverable reports to the donor will be integrated, so each UN Participating Agency should provide the information needed on time and in the format established by the Managing Agent

The AWP will be accompanied by a budget table, disaggregated by the responsible Participating UN Agency. It will also include the identification of specific procurement and recruitment activities to be undertaken. The AWP and budget will be reviewed and agreed by the PB.

FAO will provide the requested technical assistance while following its internal administrative controls and procedures. Regardless, this assistance should be reflected in the Annual Work Plan approved by the PB and the advance reports should be shared in a timely manner with the UNDP in order to integrate them into its reports to the Norwegian Ministry of Foreign Affairs.

Similarly, the activities whose resources are managed through the UNDP will be conducted based on the rules and procedures of that organization.

In close collaboration with the Environment and Energy Programme Officer of UNDP, the PM will be responsible for preparing reports for the PB and for the N-MFA.

The main tasks are:
- ✓ Follow up on progress made on the tasks outlined in the work plan, as well as on a future mobilization of resources for the project's sustainability;
- ✓ Prepare, and monitor compliance with work plans (annual and quarterly);
- ✓ Prepare budgets (annual and quarterly);
- ✓ Support FAO on the elaboration of ToR for technical inputs and services to be cleared and contracted by FAO as requested by CONAFOR.
- ✓ Prepare ToR for inputs and services to be cleared and contracted through UNDP as requested by CONAFOR that do not include those created by FAO.
- ✓ Coordinate with the UN Agencies participants the inputs needed to develop the project;
- ✓ Support the project's technical and administrative documents;
- ✓ Prepare technical, financial and progress reports (quarterly, annual and final).
- ✓ Inform the PB and the TAC of the project's progress, problems and possible solutions adopted and/or recommendations on how to achieve its objectives;
- ✓ Prepare and present a project situation report at any meeting or meetings about the project;
- ✓ Supervise and ensure compliance with the work of the personnel contracted through UNDP according to the contractual criteria contained in the Implementing Manual;
- ✓ Be the Executive Secretariat of the PB and TAC meetings.
- ✓ She/he will be overseeing a team consisting of an administrative assistant, the coordinator for each mid-term outcomes, and the necessary staff required, and if needed, sub-contractors.
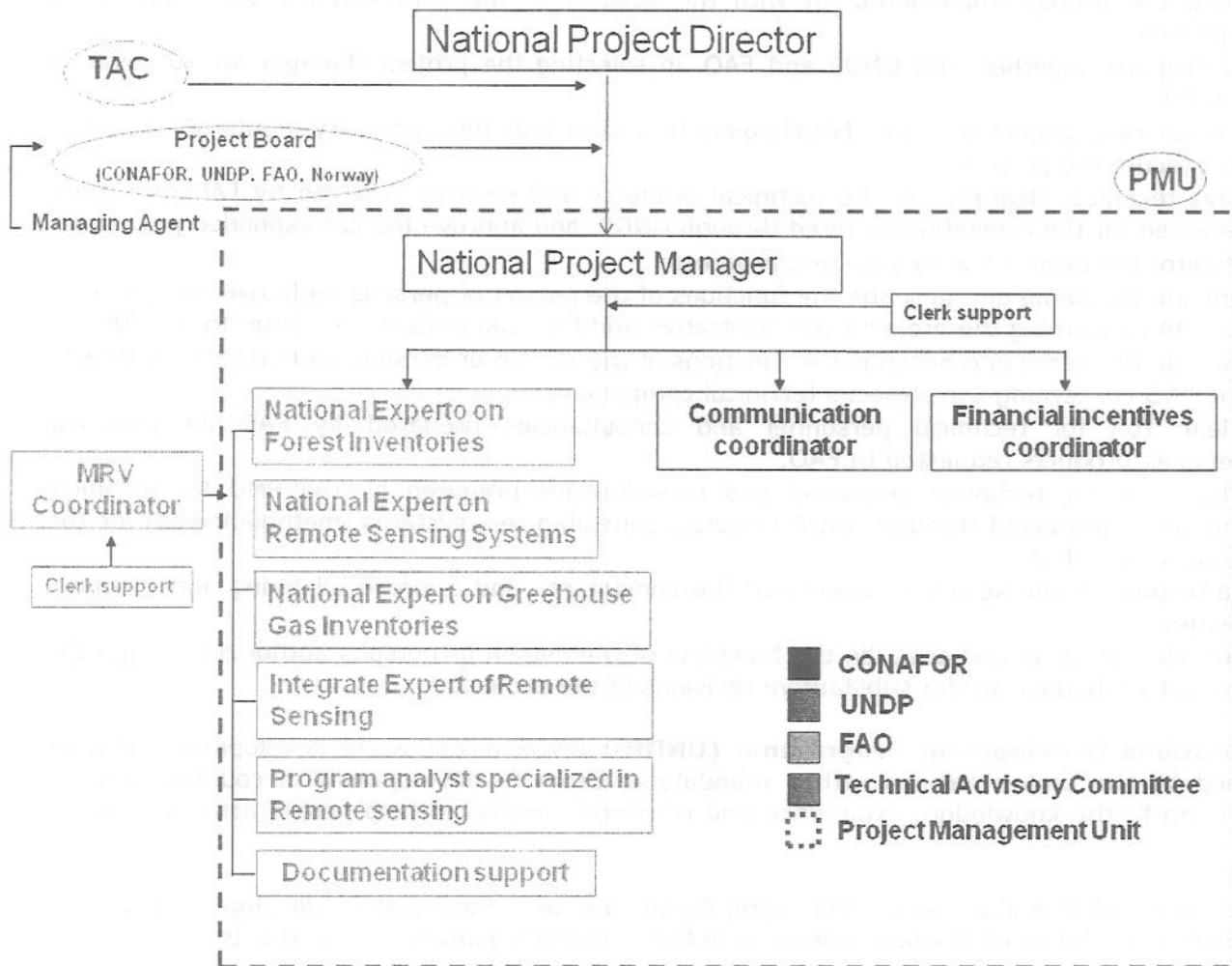
Figure 9: Project Coordination Structure

Functions of the participants in the Project

Ministry of Foreign Affairs (SRE): The Government of the United Mexican States has designated the Technical and Scientific Cooperation Directorate of the SRE as the official counterpart of the UN Agencies in Mexico. Its principal responsibilities are:

· As the entity responsible for technical cooperation in México, to act as the Mexican government's official counterpart to UN Agencies, UNDP; specifically, and in accordance with the National Development Plan, to formalize approval of the project cooperation documents presented to UNDP by federal, state and private entities;

· If necessary, to make a written request to UNDP for reports on the project;

· To approve the annual audit plan for the project and, in accordance with UNDP norms and procedures, to convene an information and consultation meeting prior to the audit.

· If considered expedient, to attend at least one PB meeting of the project per year; and

· As required, to participate in tripartite meetings or in any follow-up or reorientation sessions.

National Forestry Commission (CONAFOR): is the National Implementing Partner responsible for the fulfillment of the project's results.

Its principal responsibilities are to:

- ✓ Lead the project implementation with the support of the PMU and the participating UN Agencies.
- ✓ Participate, together with UNDP and FAO, in selecting the project Manager for approval by the PB;
- ✓ Designate a project Director (Focal point) to ensure that the necessary inputs are available to execute the project;
- ✓ Give technical clearance of the technical products and services received by FAO and those received for the consultancies hired through UNDP, and approve the corresponded payments.
- ✓ Monitor the project's work plan and progress;
- ✓ Provide the name and describe the functions of the person or persons authorized to deal with the MA concerning the project's administrative and financial matters in a letter to the MA;
- ✓ Provide the name and describe the functions of the person or persons authorized to deal with the FAO concerning the project's technical components
- ✓ Clear ToR for technical personnel and consultancies prepared by FAO for technical services/products requested to FAO.
- ✓ Clear ToR for technical personnel and consultancies prepared by the PMU for technical products contracted through UNDP (studies, consultancies, systems, methodologies) for the project execution.
- ✓ Participate in the selection process of the consultants and approve all hiring and payment request.
- ✓ Provide the name and describe the functions of the person or persons authorized to sign the project e's budget and/or substantive revisions of the project.

United Nations Development Programme (UNDP): UNDP is the world development network established by the United Nations with a mandate to promote development in countries and to connect them to the knowledge, experience and resources needed to help people achieve a better life.

In this project, UNDP will act as the Managing Agent, and as a Participating UN Organization. The responsibilities as Managing Agent are detailed in the Fund Management Arrangements.

As participating UN Organization in the project, UNDP's principal responsibilities are to:

- · Designate a project officer responsible for providing substantive and operational advice and to follow up and support the project's development activities (Project Assurance);
- · Be part of the Project Board;
- · Use national and international contact networks to assist the project's activities and establish synergies between projects in common areas and/or in other areas that would be of assistance when discussing and analyzing the project, if this is requested by CONAFOR;
- · Provide technical advice to the project regarding activities on gender equity and strengthening civil society participation. These specialized services will be provided as requested by CONAFOR, on the condition that the costs will be fully recovered.
- · Assist the technical Participant UN Organization in the implementation of South-South cooperation approach and the dissemination of lessons learned from the project as requested from CONAFOR.
- · Also to provide technical assistance as requested by CONAFOR or the PB.
- · Providing international experiences and best practices for conceptual and administrative methodological improvement of the project.
- · Support the organization of international and national events as requested
- · Follow up the assessment process.

The UNDP country office (UNDP-MX) in Mexico will monitor the progress towards the intended results through regular contact with the Project Management Unit and national counterparts, and through monitoring visits meant to address implementation matters and foster problem solving.

Food and Agriculture Organization of the United Nations (FAO), FAO helps developing countries and countries in transition modernize and improve agriculture, forestry and fisheries practices and ensure good nutrition for all. As an UN-Agency participating in the project, FAO's principal responsibilities are to:

- Designate a responsible team for providing technical assistance to support the development of the project's outcomes under FAO´s responsibility (Outcome 1);
- As required by CONAFOR, FAO will offer continuous technical assistance in the designing, development and implementation of the project.
- A technical officer selected by FAO will spend periods of time in Mexico to support the technical development of the project.
- Be part of the Project Board.
- Provide technical assistance and backstopping on the design and implementation of the MRV-System and to achieve the Outcomes of the project.
- Elaborate ToR for technical personnel and consultancies for the services/products requested by CONAFOR to FAO.
- Give technical clearance for technical products not contracted through the FAO (studies, consultancies, systems, methodologies) to third parties before payment is undertaken by the Managing Agent, as requested by CONAFOR.
- Provide technical assistance for the development, application and training on activities accorded with CONAFOR.
- Use national and international contact networks to assist the project's activities and establish synergies between project´s in common areas and/or in other areas that would be of assistance when discussing and analyzing the project.
- Follow up activities that require joint support considering the guidelines established in the Guidance Notes of the project.
- Leveraging the network of national and international contacts for the activities of the project and synergies between projects of common areas.
- Propose the development of physical and virtual materials for the training of key actors
- Providing international experiences and best practices for conceptual and methodological improvement of the project.
- Support the organization of international and national events.
- Propose to the Board of the Joint profiles for the recruitment of specific consultancies to monitor the development of research and analysis.
- Follow up the assessment process.
- Support the MA with project reports on the financial documentation related with FAO´s administrative activities, in order to be integrated by the MA to be presented to the donor.

In all technical support that is required by CONAFOR to FAO, there will be a direct interaction. Never the less it is important that this technical assistance is reflected in the Annual Work Plan of the Project, approved by the Project Board. It is also necessary to provide information to UNDP regarding the results of this technical assistance from FAO, in order to be integrated in the reports to the Norwegian Ministry of Foreign Affairs (N-MFA).

To provide the technical assistance requested, FAO will receive the budget established in Outcome 4 (Project Management) that is set aside for its implementation. FAO will follow its internal administrative controls and procedures to manage this budget.

Norwegian Ministry of Foreign Affairs (N-MFA): Norway shares with Mexico the need for practical experiences of robust MRV systems as part of the ultimate REDD+ regime. Technical and financial support from the Norwegian Ministry of Foreign Affairs (N-MFA) will enable Mexico to accelerate development of its own MRV system as well as to enable stronger dissemination of lessons learned.

In this project, the Norwegian Ministry of Foreign Affairs should have the possibility to:

- Observe the Project Board
- Provide experts or recommend experts to the TAC
- Participate in the selection of experts to the TAC
- Suggest ways of interchange or cooperation between relevant Norwegian institutions/technicians and institutions/technicians connected to the project.

In addition, annual consultation meetings, separate from the PB meetings, with the participation of Mexican government representatives, representatives of the UN participating Agencies (FAO and UNDP) and representatives from the Norwegian government, should be held once a year, in order to:

- review the progress of the project
- discuss possible revisions of plans and budgets
- discuss issues of special concern for the implementation of the project

Fund Management Arrangements

This project document strengthens interagency cooperation and contributes to the programmatic harmonization process of the United Nations team in Mexico.

Joining forces for common outcomes in the objectives of support the development of Mexico´s MRV system as well as to enable stronger dissemination of lessons learned, FAO and UNDP signed this project document with the National Forestry Commission (CONAFOR) and with a representative of the Norwegian Ministry of Foreign Affairs. The Government of Norway signed this project document as witness.

For this project, the figure of a Managing Agent (MA) is considered. As set out in the UNDG guidance, the elements to be considered in the selection of the MA are:
i. Country presence,
ii. Expertise in the area covered by the Project (comparative advantage),
iii. Existing relationship with national counterparts, and;
iv. In-country financial/administrative management capacity.

The Governments of Mexico and Norway have selected UNDP as the Managing Agent for this project.

As the Managing Agent, UNDP is accountable for supporting CONAFOR in managing the project in line with the common work plan, specifically for timely disbursement of funds, and supplies and for coordinating technical inputs by all participating UN organizations. The MA also follows up with the national implementing partner on implementation, and is accountable for narrative and financial reporting to the Project Board.

UNDP also co-ordinates monitoring of progress in achieving results and is accountable for progress and financial reporting on the UN's inputs to the PB. The relationship between the donor(s), MA, and participating agencies is established using standard instruments.

UNDP's main duties as MA are to:

- Receiving the contribution of the donor (s)
- Provide the management platform to support CONAFOR to implement the project and receive the inputs required to achieve the project objectives, in line with the common work plan, specifically for timely disbursement of funds, and supplies.
- Provide the project´s funds to the PMU and FAO as established in the Annual Work plan approved by the Project Board.

- Coordinate with the PMU the consolidation of reports to be presented to the PB and submission to the donor, in accordance with its policies and procedures and its rules of operational guidance.
- Prepare a budget for the project in accordance with their procedures, and covering the mutually agreed components of the project and submit it for approval by the PB.
- Account the received income for the financing of the project, in accordance with its financial rules.
- Take appropriate measures to publicize the project after consultation with CONAFOR, as well as United Nations agencies involved.
- Follow up on audit operations performed by internal auditors and / or external in accordance with its financial rules.
- Administer the financial resources agreed in the revised work plan and approved by the Project's Board, ensure efficient and effective management of resources engaged and to inform on its origin and destination.
- Supervise and follow up every project activity requiring UNDP administrative support.
- As deemed necessary, use the project's resources to prepare external evaluations and audits and to monitor them; and
- Hire, with funds from the project, evaluations and external audits as may be necessary and monitor its procedures.

Administrative arrangements

To manage the resources, UNDP will make its installed capacity available to the project, guaranteeing that their use is both transparent and prompt. The budget and work plan are given in the Annexes of this document. If modifications are made to this section, they must be considered and approved by the PB.

It should be mentioned that any services provided to the project by UNDP will be in accordance with its internal guidelines and regulations.

The amount for funding is up to 90 million NOK over three years. The Norwegian donation is stated in the project document in USD at the UN official exchange rate. The Norwegian contribution is expected to amount to approximately US 15,355,741 and the project will be financed by the Norwegian Ministry of Foreign Affairs (N-MFA).

As Managing Agent, UNDP earns a fee in supporting project development and implementation (7% of the total project is approximately US$ 1,004,581.19).

From the UNDP overhead fee, UNDP México will transfer US$ 105,000.00 USD to FAO to cover the overhead as indirect costs (7% overheads).

UNDP will retain the resulting approximately US$ 899,581.19 on the total GMS provided by the project.

This amount is not additional of the 90 million NOK (aprox. US$15,355,741.00) provided by the N-MFA for the project implementation. Specialized service delivery costs for project implementation may be recovered directly, in accordance with the respective participating UN organizations' policies.

If payment is made in a currency other than United States dollars, its value will be determined by applying the United Nations operational exchange rate in force on the date of payment. If, before UNDP has used the total amount deposited, there is a change in the United Nations operational exchange rate, it will be adjusted in line with the value of the balance of unused funds. If this leads to a loss in the value of that balance, UNDP shall inform the donor. If these additional funds are not available, UNDP may reduce, suspend or cancel its assistance to the project.

On the other hand, activities will also have to be adjusted to the cash funds available; also in this case, if there is a deficit because of the exchange rate, UNDP has the obligation to inform the National Implementing Partner to determine whether it is necessary to transfer additional funds or simply to make budget changes.

If the event the project is suspended, reduced or cancelled, UNDP will return the unused funds at the United Nations operational exchange rate in force on the date they are returned to the Donor; if there is an exchange rate loss, the deficit will be charged to the project.

Because the Project Board will supervise and monitor the project based on a satisfactory and detailed work plan design, no unforeseen circumstances are expected that would imply administrative risks in its execution. It is envisaged that, as the project proceeds, counterparts will be added as partners to implement it or as donors, and they may be either state governments or federal executive entities.

It is important to mention that any services provided by UNDP to the project will be performed under its internal policies and rules, as stated on the NIM handbook.

Administrative arrangements between participating UN Organization in the Project

To provide the best support to the National Implementing Partner, all the parties that sign this Project Document agree that:

1. FAO will provide the technical assistance under its expertise, to support the project implementation and to develop the required products and services under its responsibility (Outcome 1).
2. In the same basis, FAO will provide, as part of its technical assistance, the needed feedback to the products and services subcontracted by CONAFOR through UNDP, as requested by CONAFOR.
3. UNDP will provide the administrative and financial platform to support CONAFOR in the implementation of the project.
4. These services, and the direct cost associated with them, will be established in the Annual Work Plan for the project and in the annual budget approved by the Project Board.

All related cost associated with the technical assistance that will be provided by FAO, are budgeted on the Results Framework table under Outcome 4 (Project Management). The total amount FAO will receive for its technical support is $1,500,000.00 USD not considering the related cost recovery percentage (GMS). This budget is established in the outcome 4 of the table (Project Management).

UNDP, as requested by CONAFOR, will transfer this amount to FAO as established in the attached agreement.

Commitments by UNDP and the Mexican government to provide support services

The support services required of UNDP will be provided in accordance with the conditions mentioned below. The UNDP office in the country can provide the necessary support services and assistance requested, whether to prepare reports or make direct payments. In providing these services,

The UNDP country office, when asked to do so by the National Implementing Partner, may provide support services for the project, including:

- National and international technical support provided by the United Nations System including the E&E Group of UNDP HQ, and the UN-REDD expertise.
- Project design and strategic planning.
- Project administration by making technical and financial follow-up available, with a results-based approach.
- Develop international, national and local international knowledge networks based on United Nations System experience.
- Provide the administrative support for the selection of project personnel that will be headed by CONAFOR and FAO. UNDP will assist in awarding contracts and could suggest candidates (individuals or companies) for the project's substantive and administrative work.
- Acquire goods and services established in the Acquisition Plan of the project, and as requested by CONAFOR, in accordance with its procedures and policies.
- The acquisition of goods and services as well as contracting personnel for the project are both the responsibility of the National Implementing Partner and will be charged to the project's budget. It is important to mention that the candidates for the posts of Project Manager and Administrative Assistant should be selected jointly by the PB.

Should any demands or controversies arise concerning the provision of services by the UNDP office in the country, they will be dealt with according to this document's basic assistance model.

If there are changes in the need for support services while the project is in force, the project document will have to be revised as mutually agreed by the UNDP Resident Representative and the counterpart institution.

Recruitment

The following principles must be followed with respect to the recruitment process:

1. <u>Competitiveness:</u> The recruitment must be made on the basis of a wide search for the most qualified candidates and selection of the best suited individual according to the job description and the project document.
2. <u>Openness and transparency</u>: The recruitment process must be open and transparent, giving full and equal information to all candidates, with clear criteria for selection, and with the participation of several individuals in the decision-making process, through the Project Recruitment Panel (PRP).
3. <u>National recruitment:</u> National personnel will be recruited to provide technical inputs to the maximum extent possible; international personnel will be recruited only when the necessary technical expertise is not available in México.

Recruitment of International Project Personnel (See Annex 1)

The recruitment and administration of international consultants are usually assigned to the MA, but it can be supported also by other participating UN Agency. In some cases, the Participating UN Agencies are able to mobilize internal technical assistance on a cost-recovery basis, which has the advantage of simplifying and speeding up the recruitment process. Such internal recruitment will only be used where the Participating UN Agency staff member has expertise equal to or greater than that likely to be secured through external recruitment.

Audit Clause

The audit of the project is an integral part of financial and administrative management within the accountability framework of UNDP. The project will be audited in order to obtain reasonable

assurance that resources are managed in accordance with financial regulations, the terms and conditions of the project document, work plan and budget.

The budget of the project shall provide the necessary resources to conduct the audit. The Audit will be conducted by the legally recognized auditor of the Government, or by a commercial auditor engaged by the Government.

The firm selected by UNDP Mexico, through a bidding process and subjected to a rigorous evaluation within the principles of transparency, neutrality and cost benefit will take over this exercise in accountability.

This clause shall not apply to FAO, as a Participating UN Agency. FAO will establish a separate ledger account under its financial regulations and rules for the receipt and administration of the funds disbursed to it by UNDP for the technical backstopping activities of this project. That ledger account will be administered in accordance with FAO's own regulations, rules, directives and procedures, and will be subject exclusively to the internal and external auditing procedures laid down in the financial regulations, rules, directives and procedures applicable to it.

Security

It is UNDP's priority to ensure basic minimum conditions of security within the project operation, and the project offices must comply with security requirements and operational standards established by the United Nations Department of Safety and Security (UNDSS).

To achieve the above mentioned requirement, there will be regular meetings, workshops and training for project team and contracted personnel under the project in order to familiarize them with the regulations, procedures and training necessary to ensure compliance with such standards. It is important to mention that the staff recruited under the project will be situated in the offices of the National Implementing Partner (CONAFOR). The measures of access control and security of these facilities follow those established by the counterpart and if additional measures should be taken, the project shall consult them before taking the decision unilaterally.

The recommendations of the UNDSS review will be shared with the counterpart to reach agreement and guarantee the security of personnel to ensure compliance with MOSS. The resources necessary to implement these measures will be reviewed in the steering committee and will seek co financing from the counterpart for such purposes. If the project requires renting office spaces outside CONAFOR facilities, the project shall seek spaces that comply with the security principles and requirements established by the UN's Moss Compliance, and in accordance with the guidelines of CONAFOR. These criteria will be established under the terms of reference for office rental and spaces for workshops and hotels will be an important factor for the determination of such spaces.

Finally, UNDP regularly circulates a memo to those geographic areas that are considered at greatest risk for project staff. Project staff that is intended to travel to, or be stationed in the areas that are in a high security phase (indicated by UNDSS), must complete the Advanced Course on Security the Field course.

Monitoring, Evaluation and Reporting

Table 3: Project Monitoring Framework (PMF)

Expected outcomes(Outcomes and outputs)	Indicators	Means of Verification	Capture methods (with indicative timetable and frequency)	Responsible	Risks and assumptions

Expected outcomes(Outcomes and outputs)	Indicators	Means of Verification	Capture methods (with indicative timetable and frequency)	Responsible	Risks and assumptions
Outcome 1: Designing and implementing an MRV system					
1.1. Ensuring project coherence and consistency	-Advisory Group selected and approved. At least 80% of the proposed members accept to participate. -Clearly defined rules of interaction with Advisory Group	- Percentage of participation -Evaluation of other regulations around other Advisory groups	To be determined	CONAFOR/FAO	Clearly defined roles to guarantee participation.
1.2. Country diagnosis and key orientations for MRV system for AFOLU sector & REDD+	-Participation on workshops to discuss definitions and methodologies is high. Representativeness of different institutions is high -General agreement is reached on major decisions	-Percentage of participation per institution -Review of existing definitions and programs	To be determined	CONAFOR/FAO	Institutional roles need to be clarified Invitations to workshops are sent well in advance Understanding of REDD+ and MRV systems needs to be high.

Expected outcomes(Outcomes and outputs)	Indicators	Means of Verification	Capture methods (with indicative timetable and frequency)	Responsible	Risks and assumptions
1.3 Improved Emission factors: National Forest Inventory (NFI)	-Participation on workshops to discuss definitions and methodologies is high. -Clear understanding and documentation of methodologies -Clear identification of gaps and problems -Well identified methodology to incorporate REDD+ emission factors. -Clearly identified QC/QA activities to reduce uncertainties	-Percentage of participation per institution -Final data compliant with all reporting principles under the Climate Convention (transparency, completeness, comparability, consistency, and accuracy) -Final sampling added to determine REDD+ emission factors -Improvements suggested	To be determined	CONAFOR/FAO	Undocumented methodologies and inconsistent sampling -lack of capacity to include changes in the sampling requirements of the inventory -lack of QC/QA from past inventories
1.4. Improved Activity Data: Satellite operative forest monitoring system	Land use change data available at national level in 2012 Well identified methodologies to have enough annual revisits -Well identified methodology to incorporate REDD+ emission factors. -Clearly identified QC/QA activities to reduce uncertainties -Clearly documented methodologies for carbon + co-benefit monitoring	-Ground validation of satellite results -Final data compliant with all reporting principles under the Climate Convention (transparency, completeness, comparability, consistency, and accuracy) -Comparison with other available datasets -Data available through public platforms (e.g. internet) -Improvements suggested	To be determined	CONAFOR/FAO	-Satellite antenna available and properly working. -Institutional agreements in place -Enough funding for long-term monitoring. -High technical knowledge required -Ineffective institutional data sharing

47

Expected outcomes(Outcomes and outputs)	Indicators	Means of Verification	Capture methods (with indicative timetable and frequency)	Responsible	Risks and assumptions
1.5 Improved National forest GHG inventories to estimate emission from sources and absorptions by sinks for the AFOLU sector	-Low uncertainty data on GHG emissions available in 2013 -Development of a National Archive to record methodologies, processes and available datasets. -Clearly identified QC/QA activities to reduce uncertainties -Priority activities defined for Activity Data and Emission Factors, to reduce uncertainties.	-Data available through public platforms (e.g. internet) -Final data compliant with all reporting principles under the Climate Convention (transparency, completeness, comparability, consistency, and accuracy) -Improvements suggested	To be determined	CONAFOR/FAO	-Institutional role not strong enough to guarantee improvements in the final Inventory -Lack of methodological clarity around the processes involved in the evaluation of GHG emissions -Political influence over GHG results
1.6 Ensuring consistency between RL/REL considerations into MRV system	-Rates of historic deforestation and historic degradation by 2011 -Clearly identified QC/QA activities to reduce uncertainties -Available emission factors to run the historic estimates of EqCO2	-Data available through public platforms (e.g. internet) -Final data compliant with all reporting principles under the Climate Convention (transparency, completeness, comparability, consistency, and accuracy)	To be determined	CONAFOR/FAO	-Unclear methodologies for REL/RL -Accounting rules not yet defined under the Convention -Inconsistent methodologies between time periods

Expected outcomes(Outcomes and outputs)	Indicators	Means of Verification	Capture methods (with indicative timetable and frequency)	Responsible	Risks and assumptions
1.7 MRV multi-scale research: linking national, state, and local scales	-Multiscale MRV methodologies documented and under test by 2012 -Well defined monitoring linkages between scales -Clearly identified QC/QA activities to reduce uncertainties	-Cost efficiency of chosen methodologies -Application of the chosen methodologies to obtain quantitative targets.	To be determined	CONAFOR/FAO	-Nationally undefined role of community participation under REDD+ schemes -Unclear embedding of REDD+ financial mechanisms and other operative local incentives -Unclear needs on final merging of bottom-up to national-down approaches.
1.8 Ensuring adequate and stable institutional arrangements for operation of MRV system	-MoU or agreements among institutions -Development of new policies -Institutional capacity and resources improved	--Stability of the institutional arrangement over time -Implementation of suggested changes to reduce uncertainties and improve the GHG estimates -Multi-institutional representativeness in public events around the MRV and GHG emission products.	To be determined	CONAFOR/FAO	-Legally undefined competences among institutions -Uneasy cooperation among institutions -Politically influenced institutional arrangements
1.9. Developing and implementing links of MRV systems with other non-carbon environmental monitoring efforts	-Win-Win maps on carbon + other commodities + safeguards available by 2012	-Data available through public platforms (e.g. internet)	To be determined	CONAFOR/CONABIO/FAO	-Uneasy cooperation among institutions -Undefined variables and methodologies for safeguards and co-benefits.

Expected outcomes(Outcomes and outputs)	Indicators	Means of Verification	Capture methods (with indicative timetable and frequency)	Responsible	Risks and assumptions
Outcome 2: Regional cooperation and South-South capacity building					
2.1 Promoting common approaches and South-South cooperation	-Methodologies documented and freely disseminated by 2012 -National participative workshops to inform on MRV methodologies and implications -Participation in international forums and congresses to disseminate the Mexican system. -Organization of in-house training workshops for knowledge transfer both nationally and internationally	-Data available through public platforms (e.g. internet) -Brochures available at large public events (COP) -Number of training courses organized for national and international technical individuals.	To be determined	CONAFOR/UNDP	-Mexico seen as a regional unbalanced power. -Competition with other regional centers
2.2. Enhancing capacity to operate MRV system	- New capacities Developed by 2012 - New resources/ equipments acquired -Integrated datasets and methodologies	- Idem	To be determined	CONAFOR/UNDP	-Delayed delivery of materials/equipment -Long-term viability of new resources -In-house maintenance of the new built capacities.

Expected outcomes(Out comes and outputs)	Indicators	Means of Verification	Capture methods (with indicative timetable and frequency)	Responsible	Risks and assumptions
Outcome 3: Characterization of local incentives: research on REDD+ funding through experiences and case studies in Mexico					
3.1 Evaluating experiences and case studies to design local incentives	- Documented methodologies, initiatives, programs to improve REDD+ financing by 2011	-Number of workshops, seminars, web delivery of the lessons learned	To be determined	CONAFOR/Climate Focus	-Lack of transferability of Mexican lessons learnt. -Uncoordinated documents with inconsistent views

Monitoring: The content of Table "Project Monitoring Framework (PMF)" summarizes monitoring arrangements for the project, including monitoring activities that the participating UN organizations and/or national partners will undertake (such as baseline collection, reviews or studies if necessary to measure effect/impact, field visits, evaluation etc.), the timing of such activities and the respective responsibilities.

Monitoring and Evaluation (M & E) Plan (see Annex 2)

Project monitoring and evaluation will be conducted in accordance with established UNDP procedures and will be provided by the project team and the UNDP Country Office (UNDP-MX). The Project Monitoring Framework provides performance and impact indicators for project implementation along with their corresponding means of verification. These will form the basis on which the project's Monitoring and Evaluation system will be built.

Independent Evaluation

1.The project will be subjected to an independent external evaluation at the end of the project.

An independent Final Evaluation will take place three months prior to the terminal review meeting. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP to be validated and approved by the Project Board.

Table 4. Indicative Monitoring and Evaluation Work plan and corresponding Budget

Type of M&E activity	Responsible Parties	Budget US$ Excluding PCU and co-executants staff time	Time frame
Inception Workshop	▪ PCU ▪ FAO ▪ UNDP CO	1,500	Within first two months of project start up
Inception Report	▪ PCU ▪ UNDP CO	None	Immediately following IW
Measurement of Baseline Indicators and Field Establishment of Project Impact Studies	▪ PCU ▪ FAO ▪ CONAFOR	To be finalized in Inception Phase and Workshop. Costs covered under Outcome 4 budget lines.	Start, mid and end of project
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)	▪ Oversight by Project FAO Technical Advisors and Project Coordinator ▪ CONAFOR	To be determined as part of Annual Work Plan preparation. Indicative cost 10,000.	Annually prior to APR/PIR and to the definition of annual work plans
Quarterly Progress Reports	▪ PCU ▪ FAO ▪ UNDP	None	Brief reports (not printed) for the Project Board meetings where highlights the main achievements, opportunities and barriers of the project implementation in the quarter
Semi -annual Project Reports (every six months)	▪ PCU ▪ FAO ▪ UNDP ▪ CONAFOR	None	Semi - annually (6 months)
Annual Project Reports	▪ PCU ▪ FAO ▪ UNDP ▪ CONAFOR	None	Annually
Project Board Meetings	▪ PCU ▪ FAO ▪ CONAFOR ▪ Hired consultants as needed	None	Quarterly Extraordinary meetings can also be programed
Final External Evaluation	▪ PCU ▪ FAO ▪ CONAFOR ▪ UNDP ▪ External Consultants (i.e. evaluation team)	35,000	At the end of project implementation
Terminal Report	▪ PCU ▪ FAO / CONAFOR ▪ UNDP ▪ External Consultant	None	At least one month before the end of the project

Lessons learned	▪ PCU ▪ UNDP (suggested formats for documenting best practices, etc)	15,000	Mid-term and end of project
Audit	▪ UNDP ▪ PCU	17,500	Yearly
TOTAL indicative COST Excluding PCU staff time, FAO and UNDP staff and travel expenses		US$ 50,000 indicative	

Legal Context or Basis of Relationship

This section specifies what cooperation or assistance agreements[10] form the legal basis for the relationships between the Government and each of the UN organizations participating[11] in this project.

Participating UN organization	Agreement
UNDP	This Project Document shall be the instrument referred to as the Project Document in Article I of the Standard Basic Assistance Agreement between the Government of Norway and the United Nations Development Programme, signed by the parties on December 10th, 2010.
FAO	The Food and Agriculture Organization of the United Nations and UNDP signed agreement for the establishment of the FAO Representation in [COUNTRY] on [DATE].

The Implementing Partners/Executing Agency[12] agree to undertake all reasonable efforts to ensure that none of the funds received pursuant to this project are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by Participating UN organizations do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this project document.

The reference instrument for the agreement between the Special Fund and the Government of Mexico (signed on 23 February 1961), together with its two resolutions on assembly, is part of this document.

For the purposes of the agreement, the Government's executing organism is the same as that of the host country that appears in the agreement. The document governing its norms is the National Projects Implementation Guidelines (NIM Guidelines).

By virtue of the Convention on Privileges and Immunities of the United Nations, signed by the Government of the United Mexican States, nothing in this document or in its signed contractual documents shall be interpreted as an express or tacit renunciation of immunity of jurisdiction, privilege, exception or other immunity enjoyed by UNDP.

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[10] Such as: the Basic Cooperation Agreement for UNICEF; Standard Basic Assistance Agreement for UNDP, which also applies to UNFPA; the Basic Agreement for WFP; as well as the Country Programme Action Plan(s) where they exist; and other applicable agreements for other participating UN organizations.
[11] Including Specialized Agencies and Non Resident Agencies participating in the Joint Programme
[12] Executing Agency in case of UNDP in countries with no signed Country Programme Action Plans

Work plans and budgets Work Plan for: A national Multiscale & Multifunctional MRV system for REDD+: proof-of-concept in Mexico   Period (Covered by the WP) 2011[13]

OUTCOME 1								
UN organization-specific Annual targets	UN org	Activities	TIME FRAME			Imp. Partner	PLANNED BUDGET (in US$)		
			Y1	Y2	Y3		Source Funds	Budget Description	Amount
Outcome 1: Designing and implementing an MRV system									
1.1. Ensuring project coherence and consistency		Creation of an Advisory Group to guarantee technical consistency and navigate project	X	X	X				132,000
1.2. Country diagnosis and key orientations for MRV system for AFOLU sector & REDD+		Characterization of current status of MRV system	X			CONAFOR	Norwegian Ministry of Foreign Affairs (N-MFA)		55,000
		Analysis of key definitional issues	X						50,000

	Activities							Responsible	Funding		Budget
1.3 Improved Emission factors: National Forest Inventory (NFI)	Achieving and consolidating Tier 2 reporting	X									300,000
	Estimating REDD+ emission factors	X	X								1,050,000
	Towards Tier 3 reporting	X	X								1,050,000
1.4 Improved Activity Data: Satellite operative forest monitoring system	Achieving and consolidating Tier 2 reporting	X						CONAFOR/ CONABIO	(N-MFA)		200,000
	Continuous and near-real time assessment of land uses and land use changes	X	X	X							1,700,000
	Develop and implement platform to access activity data		X	X							375,000
1.5 Improved National forest GHG inventories to estimate emission from sources and absorptions by sinks for the AFOLU sector	Achieving and consolidating Tier 2 reporting	X						CONAFOR	(N-MFA)		450,000
	Develop an archive for the GHG Inventories	X	X								80,000
1.6 Ensuring consistency between RL/REL considerations into MRV system.	Defining Reference Emission Levels and Reference Levels	X	X					CONAFOR	(N-MFA)		900,000

1.7 MRV multi-scale research: linking national, state, and local scales	Develop methodologies to implement consistent MRV systems among scales	X	X	X		CONAFOR/ COLPOS-ECOSUR	(N-MFA)		3,120,000
1.8 Ensuring adequate and stable institutional arrangements for operation of MRV system	Institutional platform to coordinate MRV national system and REDD+ implementation	X				CONAFOR	(N-MFA)		120,000
	Design and develop a National REDD+ registry	X	X						200,000
1.9 Developing and implementing links of MRV systems with other non-carbon environmental monitoring efforts	Tools and platforms to report on carbon and other environmental aspect	X				CONAFOR/ CONABIO	(N-MFA)		280,000

Regional cooperation and South-South capacity building

2.1 Promoting common approaches and South-South cooperation	Results and lessons learned documented and disseminated with other countries	X	X	X						530,000
2.2 Enhancing capacity to operate MRV system	Related to emission factors	X	X	X		CONAFOR	(N-MFA)			712,000
	Related to activity data	X	X	X						500,000
	Capacity building for GHG Inventory & REDD+	X	X	X						40,000
	Enhancing Reporting capacity	X	X	X						10,580
	Capacity building for multiscale MRV implementation	X	X	X						40,000
2.3 Identifying short and long-term MRV goals: COP and beyond	Short-term: COP events on MRV	X				CONAFOR	(N-MFA)			
	Long-term: national implementation of MRV systems, REDD+ and beyond REDD+	X								150,000

Outcome 3: Characterization of local incentives: research on REDD+ funding through experiences and case studies in Mexico

3.1 Evaluating experiences and case studies to design local incentives	Design and management of locally adapted incentive systems for REDD+	X	X			CONAFOR / CLIMATE FOCUS	(N-MFA)			280,000
	Link national policies to REDD+ monitoring efforts	X	X							150,000

ANNEX 1: Steps in Recruiting National Project Personnel

Recruitment of national project personnel, whether they are in the professional or administrative support category, will follow the procedures of the MA, except when is part of the Technical Team provided by FAO to provide the technical assistance required by CONAFOR.

As above mentioned, if FAO would need to contract additional staff or experts to provide the technical assistance required, FAO will use their own procedures of recruitment and selection, in concordance with CONAFOR.

However, the following steps will be followed for all recruitment of national project personnel.

1. Prepare Terms of Reference/Job Description for the Post
The PM finalizes the ToR approved by CONAFOR for the assignment or post and in accordance with standard MA formats.

2. Identify Candidates for the Post
The PM and CONAFOR identifies candidates and obtains their curriculum vitae (CVs) and references. Candidates can be identified using consultant rosters, through referrals from professional colleagues and institutions, or by public advertisement. Identified candidates should include a mix of both men and women.

3. Select the Best Candidate
A selection committee headed by CONAFOR is formed. The selection is made on a competitive basis from a pool of at least three (3) screened applicants according to the procedures of UNDP. The following criteria should be used in identifying the best candidate:

(a) Matching of the candidate's qualifications with the TOR;
(b) Cost in terms of the candidate's likely salary;
(c) Timeliness of availability; and
(d) Performance appraisals and references on the candidate's work.

Responsibilities of the National Implementing Partner in the Recruitment Process

Actions that the National Implementing Partner must undertake are listed below.
(a) Whit the support of the Project Management Unit, draft the TORs for the consultant in consultation with the responsible Participating UN Agency.
(b) After the CVs (referred to in the UN as "Personal History Forms") and/or proposals of at least three candidates for the determinate TORs are sent by the Participating UN Agency to the established selection committee, the National Implementing Partner should review them and recommend a preferential ranking and participate in the selection process determinate (interviews, technical evaluations, etc) ..
(c) Following the selection process of the MA, the NIP should send to the MA the request of the selected candidate so it can recruit him/her.
(d) The PMU arranges for obtaining, in a timely manner, the necessary visa and residence permit for the international consultant, as well as customs clearance and reception of personal effects, living arrangements, etc.
(e) The PMU provides local monitoring and supervision of the work of the consultant, making sure that expected outputs are delivered as planned and with the required quality standards, and discussed with the appropriate parties before his/her departure.

ANNEX 2: Monitoring and Evaluation (M & E) Plan

Project monitoring and evaluation will be conducted in accordance with established UNDP procedures and will be provided by the project team and the UNDP Country Office (UNDP-MX). The Project Monitoring Framework provides performance and impact indicators for Project implementation along with their corresponding means of verification. These will form the basis on which the Project's Monitoring and Evaluation system will be built.

The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The Project's Monitoring and Evaluation Plan will be presented and finalized at the Project's Inception Report following the fine-tuning of indicators, means of verification, and the full definition of Project staff M&E responsibilities.

Activities carried out by the Participating UN Organizations shall be subject to a monitoring, evaluation and periodical reports. The below paragraphs outline the principle components of the Monitoring and Evaluation Plan that will be used to monitor project performance and evaluate its impacts.

Monitoring: Annual/Regular reviews: This sub-section states arrangements and clear responsibilities for conducting regular reviews, including annual reviews where applicable. Review of the project may also form part of UNDAF annual review.

Evaluation: This sub-section states the arrangements for, responsibility and timing of evaluation(s) of the project. It should also state how the results of the evaluation(s) will be used by relevant stakeholders. It should further state how the risks and assumptions identified in Table 2 will be managed to achieve the agreed joint project results. These should at a minimum be reviewed at the annual/regular reviews and revised as appropriate.

Reporting: This sub-section should set out arrangements for common reporting on the project results. A common reporting format should be adopted by all participating UN organizations[14].

Measurement of impact indicators related to benefits will occur according to schedules to be defined and following the general framework. Initial baseline measurements and monitoring trainings for tracking indicators will be coordinated by CONAFOR.

Periodic monitoring of implementation progress will be undertaken by the PB as part of its quarterly meetings. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

The UNDP Country Office, and FAO as appropriate, will conduct yearly visits, or more often based on an agreed upon scheduled to be detailed in the Annual Work Plan to assess first hand project progress. Other members of the PB may also accompany, as decided by the PB. All field visits will be documented and reported.

Meetings

Quarterly PB meetings.

These are the policy-level meetings of the parties directly involved in the implementation of the project. The project will be subject to a review at least four times every year. The Project

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[14] The Standard Progress Report used by the ExCom agencies or any other reporting format used by any other UN organization may be adapted for the purpose. Donor requirements should also be kept in mind. The reporting format should be approved by the Joint Programme Board.

Coordinator will prepare a brief Quarterly Progress Report (QPR) to be presented in each PB meeting for review and comments.

The QPR will be used as one of the basic documents for discussions in the PB meetings. The project's QPR will be brief but it will highlight issues and recommendations for the consideration of the PB participants on their decision making. The project coordinator will also inform the participants of any agreement reached by the stakeholders during the QPR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary.

The PB has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed during the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

Tripartite meetings

At last once in the project lifetime, a meeting with the PB and the México´s Foreign Affairs Ministry, will take place in order to inform the project achievements in supporting national priorities and policies.

Project monitoring reporting

The Project Coordinator, based in the PCU, will be responsible for the preparation and submission of the following reports as a part of the project´s monitoring framework. Items (a) through (f) are mandatory and strictly related to monitoring of project progress, while (g) through (h) have a broader function and the frequency and nature of such reports is project specific and will be defined during implementation.

(a)   Inception Report (IR)

IR will be prepared immediately by the PCU following the Inception Workshop. It will include a detailed First Year/Annual Work Plan (AWP) divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This AWP will consider the dates of field visits, support missions from the UNDP-CO or the Regional Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The IR will also include the detailed project budget for the first full year of implementation, prepared on the basis of the AWP and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

The IR will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners, complement to those stated in the Project Document, as needed. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. When finalized, the IR will be circulated to project partners who will be given a period of one calendar month in which to respond with comments or queries.

(b)   Semi-annual Progress Reports (every six months)

These reports that will outline main updates in project progress and financial execution. The reports will be provided to the PB and be presented to the donor as requested. These reports will be detailed documents covering the progress in the project implementation including areas of analysis or scientific specializations within the overall project.   The PCU will prepare the semi-annual progress reports. These reports will represent, as appropriate, the project's substantive contribution

to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

At the same time, these reports will include the financial status of the project budget according to the implementation of the activities in the AWP.

(c)   Annual Project Report (APR)

The APR is a UNDP requirement and part of UNDP's Country Office central oversight, monitoring and project management. It is a self -assessment report by project management to the CO and provides input to the country office reporting process and to UNDP executive board as well as the donors, as well as forming a key input to the TPR. An APR will be prepared on an annual basis by the project team prior to the TPR, to reflect progress achieved in meeting the project's AWP and assess performance of the project in contributing to intended outcomes through outputs and partnership work. The format of the APR is flexible but it must include the following (i) An analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome; (ii) The constraints experienced in the progress towards results and the reasons for these; (iii) The three (at most) major constraints to achievement of results; (iv) AWP, CAE and other expenditure reports (ERP generated); (v) Lessons learned, and; (vi) Clear recommendations for future orientation in addressing key problems in lack of progress. CONAFOR and FAO will have the possibility to comment and provide inputs as necessary.

(d)   Project Terminal Report

During the last three months of the project the PCU will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the project, lessons learnt, objectives met, or not achieved structures and systems implemented, etc. and will be the definitive statement of the project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's activities.