# **Legal Preparedness for REDD+ in Mexico**

**Country Study** 

November 2011



This document is the result of a legal research study conducted by International Development Law Organization (IDLO), with support from the Food and Agriculture Organization of the United Nations (FAO) and the UN-REDD Programme.









•

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the FAO, the UN-REDD Programme or the IDLO concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO, the UN-REDD Programme or IDLO in preference to others of a similar nature that are not mentioned. The views expressed in this information product are those of the author(s) and do not necessarily reflect the views of FAO, the UN-REDD Programme or IDLO.

# **Legal Preparedness for REDD+ in Mexico**

**Country Study** 



# **Table of Contents**

Table of Cor	itents	I
Acknowledg	gements	iii
Abbreviatio	ns and Acronyms	iv
Executive S	ummary	1
1 Introdu	ction	2
2.1	Laws and institutions for REDD+ design and implementation	
2.2	Legal preparedness for REDD+ reference tool	
2.3	Breadth of laws and institutions reviewed	
3 Situatin	g REDD+ within Mexico's Governance Framework	6
3.1	Mexico's federal legal and governance system	
3.2	Mexico's development goals related to REDD+	
3.3	International commitments of Mexico relevant to REDD+	
3.4	Human and indigenous peoples rights in Mexico	
3.5	Public participation in decision-making and access to information in Mexico	
4 Review	of Existing Laws and Institutions Impacting REDD+	9
4.1	Overview	9
4.2	Climate Change Strategies	10
4.3	Land Use, Tenure and Management	11
4.3.1	Overview	11
4.3.2	Land tenure	12
4.3.3	Land use planning	15
4.3.4	Extractive industries	16
4.3.5	Agriculture	16
4.3.6	Water	17
4.3.7	Protected areas and community-based natural resource management	17
4.4	Forestry	18
4.4.1	Overview	18
4.4.2	Joint forest management	22
4.4.3	Plantation management	23
4.4.4	Deforestation and degradation controls	23
4.4.5	Mexico's national forest policies	24
4.5	Environment	26
4.6	Energy and Electricity	27
4.7	Trade, Investment and Finance	28
4.7.1	Trade and investment rules	28
4.7.2	Financial transparency and accountability	28
4.7.3	Access to international financial mechanisms	30
5 Key Cha	ıllenges to Legal Preparedness for REDD+ in Mexico	31

5.1		Overview	31
5.2		Promoting Complementary State and Federal Law and Policy Frameworks	31
5.3		Securing Clean and Coherent Law and Institutional Mandates for REDD+	32
5.3.	.1	Ensuring REDD+ Activities, Guidance and Safeguards through clarity and coherence	32
5.3.	.2	Key challenges to clarifying legal and institutional frameworks for REDD+ in Mexico	33
5.3.	.3	Summary conclusions on securing clear and coherent legal frameworks for REDD+	34
5.4		Regulating Land Use for Safe and Effective REDD+ Implementation	35
5.4.	.1	Ensuring respect for REDD+ Activities, Guidance and Safeguardsin the regulation of land use	35
5.4.	.2	Key challenges to regulating land usefor effective REDD+ implementation	36
5.4.	.3	Summary conclusions on the regulation of land use for REDD+ in Mexico	37
5.5		Formalizing Benefit Distribution Systems that are Equitable and Results-based	37
5.5.	.1	Formalizing Benefit Distribution Systems that deliver results and respect Safeguards	37
5.5.	.2	Key challenges to equitable benefit distribution systems in Mexico	38
5.5.	.3	Summary conclusions on formalizing equitable benefit distribution	39
5.6		Further Challenges	40
6	Legal and	d Institutional Innovations of Mexico for REDD+	41
6.1	J	Overview	
6.2		Securing Governance and REDD+ Progress through Regional Accords	41
6.3		Building Stability in REDD+ Policies through Inter-Municipal Networks	
6.4		Developing Indigenous Carbon Sequestration Credits	41
6.5		Engaging Beneficiaries through Flexible Land Tenure Recognition Systems	
7	Conclusio	on	42

Annex 1 Legal Preparedness for REDD+ Considerations and Related Instruments

Annex 2 Mexican Laws, Regulations and Policy Frameworks relevant to REDD+

**Annex 3 List of Figures** 

**Annex 4 Persons Consulted** 

**Annex 5 References** 

# **Acknowledgements**

This Country Study was prepared by the International Development Law Organization (IDLO) with support from the FAO and the UN-REDD Programme, under their respective authorities. It draws on multi-stakeholder inputs made in consultations conducted from December 2010 to September 2010 and in an interactive workshop on November 15, 2011 in Mexico City.

IDLO and the FAO would like to express their deep appreciation to the following people who contributed invaluable suggestions towards the development of this Country Paper: Peter Holmgren, Emelyne Cheney, Patrice Talla, Francesca Felicani Robles, Alberto Sandoval, Rosalind Reeve, Julia Martínez Fernández, Dolores Barrientos A., KatharinaSiegmann, Blanca Lilia García López, Juan Carlos Zentella Gómez, Pedro Luis López Díaz, Froylán Gámez, Sergio H. Graff, Gisela Hernández, Carlos González, Eduardo A. Batllori Sampedro, Roberto Illich Vallejo Molina, Andrés III Sierra Goméz, Gustavo Alanis, Juan Carlos Carrillo, Roberto Torres Velasco, Mariana Herrero Saldívar, Luis Eduardo Gómez García, Eugenia Ibarrarán and Fernando Torres. They also wish to thank Paul Crowley, Marie-Claire Cordonier Segger, Hung Phan, and Patrick Reynaud who contributed to the legal research paper and consultations from IDLO.

Primary authors and editors:Liliana del Villar, Legal Specialist in Natural Resources, Environment and Sustainable Development Law Programs, International Development Law Organization (IDLO), and Frederic Perron-Welch, Legal Research Fellow and Biodiversity Legal Programme Coordinator, Centre for International Sustainable Development Law (CISDL).

**Co-authors and contributors**:Sarah A. Mason-Case, Legal Specialist in Climate Change, Environment and Sustainable Development Law Programs, International Development Law Organization (IDLO), and Héctor Velasco Perroni, Director of *Colegio de Abogados por el Ambiente (CAAM)* and EnvironmentalLaw Professor at *Instuto Tecnológico Autónomo de México (ITAM)*, Faculty of Law.

# **Abbreviations and Acronyms**

**CBD** Convention on Biological Diversity

**CBNRM** Community-Based Natural Resource Management

**CDM** Clean Development Mechanism

**CDI** National Commission of Indigenous Peoples

**CEDAW** Convention on the Elimination of All Forms of Discrimination Against Women

**CDM** Clean Development Mechanism

CISEN National Center of Research and National Security

COP Conference of the Parties
CONAFOR National Forest Commission
CONABIO National Biodiversity Commission
CVAP Environmental watchdog committees
EIA Environmental impact assessment
FCPF Forest Carbon Partnership Facility

FRA FAO's Global Forest Resources Assessment

**GEO-FCT** Group on Earth Observations Forest Carbon Tracking

**GHG** Greenhouse gas

**HDI** Human Development Index

ICCPR International Covenant on Civil and Political Rights

ICECSR International Covenant on Economic, Social and Cultural Rights

**IUCN** International Union for Conservation of Nature

INE National Institute of Ecology

INEGI National Institute of Statistics, Geography and Informatics

JFM Joint Forest Management LDC Least Developed Country

MRV Monitoring, Reporting and Verification

M&E Monitoring and Evaluation

NCCRS National Climate Change Response Strategy

NPD National Programme Document
NGO Non-governmental organization
PEACC State Climate Action Plan

PES Payment for Environmental Services
PEMEX Mexican Petroleum (Oil Company)

**PFP** Federal Police

Ramsar Convention on Wetlands

**REDD+** Reducing Emissions from Deforestation and forest Degradation, also sustainable

management of forests and conservation and enhancement of forest carbon stocks

SEA Strategic environmental assessment
SE National Secretary of Economy
SEDENA Secretary of National Defense

SEMARNAT National Secretary of Environment and Natural Resources

SEDESOL National Secretary of Social Development
SSP National Secretary of Public Security

**UNCCD** United Nations Convention to Combat Desertification

UNDRIP United Nations Declaration on the Rights of Indigenous Peoples
UNFCCC United Nations Framework Convention on Climate Change

# **Executive Summary**

This report on Legal Preparedness for REDD+ constitutes one of three Country Studies conducted in Mexico, Zambia and Vietnam to review existing laws and institutions relevant to REDD+ at the domestic level. It seeks to identify and analyze challenges and innovations for REDD+ implementation with the ultimate aim of drawing generic options and recommendations to support REDD+ countries in strengthening capacity. Laws and institutions not only prohibit or incentivize but they also provide an overall enabling framework that guides public and private sector activities toward desired ends. They can thus eliminate challenges to REDD+ activities, promote social and environmental co-benefits as well as improve overall implementation by enabling positive steps toward new low-emission pathways. This is particularly important for countries motivated to mitigate climate change by reducing emissions from deforestation and forest degradation without compromising the essential ecosystem services that forests provide to the economy and local livelihoods.

The strong need for Legal Preparedness for REDD+ has been highlighted in recent years with gains made in the international community as to what a future REDD+ mechanism may entail. The Cancun Agreements reached at the 16<sup>th</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change set out a basic framework for REDD+ activities, guidance and safeguards, which form the analytical foundation for these Country Studies. This is supplemented by an increasing wealth of sources on the legal and institutional aspects of REDD+ from experts in law, governance and natural resource sectors across the world. Building on these prior sources, it is hoped that the current project will identify key messages for country policy-makers based on lessons learned through the review of laws, policies and regulations and multi-stakeholder consultations at the domestic level.

The results of this one Country Study on Legal Preparedness for REDD+ in Mexico underscore the cross-sectoral and multi-jurisdictional nature of REDD+ implementation. Although it is of primary significance, REDD+ not only concerns the forestry sector but also crosscutting issues of land tenure, land use planning, protected areas, easements, land acquisitions, and trade and commerce as well as sectoral laws concerned with the drivers of deforestation and forest degradation, such as energy, agriculture and mining. The breadth is wide because laws create rights, responsibilities and hierarchies in interests that affect issues such as carbon ownership and use, the risk of reversals and displacements, participatory decision-making, results-based benefit distribution, and incentives to relieve forests of ecosystem services that can be substituted with low-emission alternatives.

As in many other countries, preparations for REDD+ implementation in Mexico are young. Athoughthe country is on the way to a stand-alone REDD+ strategy, it has not been published yet. When the strategy is ready, Mexico will still have to contend with existing laws and institutions that impact REDD+ implementation. Moreover, new draft policies and legislation in the forestry sector prepared with REDD+ in mind refer to future collaborations across all jurisdictions. However, a key challenge that remains will be to encourage other sectors to work together on different goals toward the same objective to meet the exigencies of REDD+ activities, guidance and safeguards.

This Country Study was based on a variety of generic legal instrument options to implement REDD+ drawn from a wealth of sources in the international community. Nevertheless, Mexico could still benefit from further country-driven research and assessment, technical assistance and capacity building. Those three needs are frequently associated with the scientific aspects of REDD+, such as forest reference emission levels and verification of carbon sequestration. However, this Country Study demonstrates that they also have distinctive legal aspects. In conclusion, next steps in REDD+ preparations in Mexico or elsewhere could consider how those three needs are met so as to ensure both equality and effectiveness in the REDD+ implementation.

# 1 Introduction

Forests, agriculture and land use are very importantfor Mexico's shift to the low-carbon economy and for the country's sustainable development. Mexico is highly vulnerable to the effects of climate change due to its geography and the economic inequality of its inhabitants. Land use change, forestry and agriculture play an important part in its vulnerability and adaptability. According to 2010 census figures, Mexico has approximately 107.6 million inhabitants. The country currently places 56<sup>th</sup> outof 179 on the Human Development Index (HDI) with a score of 0.750 and nearly half its population living in material poverty. Approximately 60% of the poor live in rural areas. Forests are one of Mexico's most significant natural resources and contribute directly to peoples' livelihoods. More than 70% of Mexico's forests are managed by local communities -many of which are indigenous, while the remaining land is owned by private individuals or managed by public authorities. Local and indigenouscommunities also rely on forestsfor sustenance, water sequestration and filtration, medicine and culture, as do urban populations in many States, who heat their homes and cook with biomass energy.

Mexico has an important opprtunity to halt and reverse deforestation, forest degradation and land degradation. Deforestation and forest degradation contribute to the emission of GHGs, degrade ecosystems that provide vital services and decrease global carbon sequestration. Land use change, forestry and agriculture are the second most important generators of GHG emissions in Mexico. Of 709,005 gigatonnes (Gt) of greenhouse gases emitted in 2010 in Mexico, the main emission sources were energy (60.7%), land use change, forestry and agriculture (16.3%), solid waste management (14%), andindustrial processes (9%). Tropical and temperate rain forests cover 65.3 million hectares (ha) of Mexico's land area, according to 2007 figures. Estimates of potential emissions savings from reducing deforestation and potential degradation range from 263 Megatonnes (Mt) to 333 Mt of CO<sub>2</sub> between 2012 and 2020, according to recent assessments.

Deforestation and land degradation rates in Mexico are a source of continuing concern but also offer important lessons for law and policy related to REDD+. With climate change as an immediate concern of international magnitude, Mexicohas committed to redirect its forest sector toward long-term sustainability. Between 1993 and 2007, Mexico lost more than 4 million haof its 69.2 million ha of forest cover. However, due partly to law and policy interventions, losses havebegun to slow in recent years. Deforestation and land degradation totalled over 354,035 hectares per year in 1993 – 2002. This was reduced to 155,153 hectares per year in2002 – 2007. According to the National Institute of Ecology, however, the predominant driver of deforestation and forest degradation continues to beconversion to pasture land and slash-and-burn agriculture (82%). Over-exploitation and/or illegal loggingis a distant second-most important driver (8%), followed by forest fires and pests (6%), authorized land use change for development purposes (2%), and hurricanes and other natural disasters (2%).

REDD+ is a GHG mitigation mechanism established at COP 16 of the UN Framework on Climate Change in Cancun, Mexico. Is primary aims is to encourage developing countries to undertake climate change mitigation activities in the forest sector. These activities include reducing emissions from deforestation, reducing emissions from forest degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks. It can also provide social and economic benefits with the full and effective engagement and consent of indigenous peoples and local communities in REDD+ projects.

Mexico is one of the partner countries to the UN-REDD Programme, which endeavours to prepare developing countries for a future REDD+ mechanism that creates a financial value for the carbon stored in forests. At COP16 to the UNFramework Convention on Climate Change (UN FCCC), the international community made significant gains in elaborating what such a mechanism may entail. The resulting 2010 Cancun Agreements and so-called "REDD+"

Activities, Guidance and Safeguards" at Annex I to those agreements respectively provide "policy approaches" and "guidance and safeguards for policy approaches and positive incentives on issues relating to [REDD+]." Accordingly, REDD+ projects may include activities described at paragraph 70 of the Cancun Agreements, namely, reducing emission from deforestation and forest degradation, the sustainable management of forests, and the conservation and enhancement of forest carbon stocks ("REDD+ activities"). The REDD+ Activities, Guidance and Safeguards provide guidance on how those activities can be implemented in a manner that ensures results-based and sustained outcomes, while also enhancing development goals, human and indigenous rights, and other environmental and social benefits.

Although the REDD+ Activities, Guidance and Safeguards are often held out as mitigation methods to damper adverse effects, they actually call for positive steps to ensure that policy approaches "promote and support" and "enhance" the social and environmental benefits of new low-emission pathways. This increases the challenge for Mexicoto guaranteeclimate change mitigation effects, while also improving the social and economic benefits for local and national stakeholders. Moreover, it highlights the necessity of an appropriate regulatory mix to incentivize, enforce, and otherwise guide public and private sector activities toward REDD+ goals.

The purpose of this Country Study is to provide a snapshot of Mexico's preparedness with respect to legal and institutional aspects of the Cancun Agreements and REDD+ Activities, Guidance and Safeguards as it begins to implement the UN-REDD Programme. Specifically, this Country Study identifies and analyzeskey gaps, challenges and innovations for REDD+ design and implementation in the existing policy, legal, institutional and regulatory framework with a view to the identification of potential legal and institutional reforms.

This Country Study is organized in several Parts. After this Introduction, Part 2 discusses the importance of legal preparedness for REDD+ and introduces a reference tool used herein to indentify and analyze key challenges in Mexico's legal and institutional framework, Legal Preparedness for REDD+ Considerations and Related Instruments (provided in Annex 1). Part 3 situates REDD+ within Mexico's general governance framework, including its development goals, Federal governance and laws for public participation and access to information. Part 4 reviews a wide array of existing laws and institutions in Mexico that could have a bearing on REDD+ design and implementation, including land tenure, land use planning, energy and electricity, and trade and investments, among others. Part 5 draws out key challenges to legal preparedness for REDD+ in Mexico, with a focus on those most pertinent to the Cancun Agreements and REDD+ Activities, Guidance and Safeguards. Before the Conclusion at Part 7, the final Part 6 reveals some of the innovative legal and institutional reforms that are underway in Mexico at the State and national levels that will directly or indirectly affect REDD+ implementation.

# 2 Importance of Legal Preparedness for REDD+

# 2.1 Laws and institutions for REDD+ design and implementation

Mexico faces significant challenges in creating the right regulatory mix to reduce deforestation and forest degradation and undertake other REDD+ activities. The country is certainly not unique in this respect. International guidance for REDD+, as reflected in the 2010 Cancun Agreements of the UN Framework Convention on Climate Change (UN FCCC) COP 16, arevery new. Many domestic legal regimes were created prior to international consensus, without REDD+ strategies in mind. Nonetheless, an enabling legal and institutional framework is an important prerequisite to securing effective REDD+programmedesign and implementation.

Laws and institutions not only prohibit or incentivize but they also provide an overall framework that guides public and private sector activities toward desired ends. The term "laws" is meant inclusively to encompass government policies, legislation, regulations and guidance. As this Country Study concerns Legal Preparedness for REDD+, the term "institutions" is restricted herein to legally backed customs, behavioural patterns and rules that are implemented by diverse actors. <sup>iii</sup>

In Mexico, the primary legal instruments include National Strategies, Laws and Guidance, as well as State-level Strategies and Regulations, andplay many functions in REDD+ preparedness. They furnish government actors with jurisdictional mandates, delineate public and private rights and responsibilities, create project-level programmes and implement fiscal policies that engage investors. Laws and institutions can thus have a neutral, inhibitive or facilitative effect on REDD+ implementation and are integral to the preparatory process.

# 2.2 Legal preparedness for REDD+ reference tool

This review and analysis of Legal Preparedness for REDD+ in Mexico was conducted using a Reference Tool that was designed to identify concrete legal and institutional instruments that may be conducive to fulfilling the requirements of the REDD+ activities, guidance and safeguards found in the Cancun Agreements. That Reference Tool, located at **Annex 1**, is not comprehensive and may not be applicable to each country. Nor is it meant to provide precise indicators for data collection and assessment since any such criteria are highly contextual and should be tailored to the country based on REDD+ strategies. Instead, the Reference Tool seeks to set out a variety of generic legal and institutional options available to policy makers in planning and implementing REDD+ activities. As such, it provided a foundation for a broad-based gap analysis through which the laws and institutions examined in this Country Study were identified for key challenges and innovations.

The generic legal instrument options for implementing REDD+ activities, guidance and safeguards contained in the Reference Tool are reproduced from documented recommendations found in a wealth of sources. For instance, one source, the UN-REDD Programme and Chatham House, *Guidance for the Provision of Information on REDD+ Governance (Draft)*, identifies policy, legal, institutional and regulatory frameworks as one of the three pillars of REDD+ governance. There, "REDD+ governance is assumed to refer to the oversight of all institutions, policies and processes that a country has in place at national and subnational levels to implement REDD+." Figure 1 illustrates the pillars and principles that characterize good governance under that model. The pillars of good governance for REDD+ occur simultaneously and hence all contain legal and institutional considerations underpinned by the key principles: accountability, effectiveness, efficiency, equity, participation and transparency. Relevant elements of

those pillars that have been incorporated into the Reference Tool as legal instrument options include, *inter alia*, clarity and coherence of laws and institutional mandates across sectors impacting REDD+, such as forestry, land use and trade and investment; full and effective stakeholder participation in the design of policies relating to REDD+; and accessibility, fairness and independence of grievance mechanisms. vi

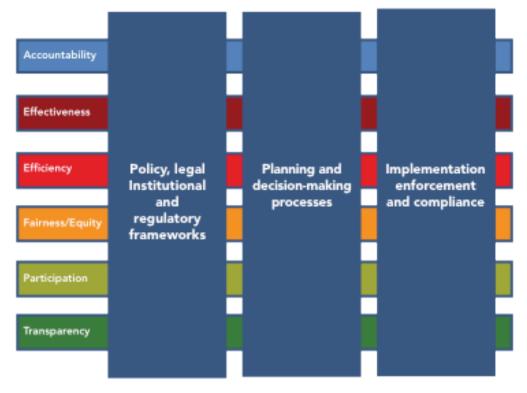


Figure 1: Pillars and Principles of Good Governance for REDD+

(UN-REDD & Chatham House, 2011)

Additional key sources from which specific legal instrument options were documented in the Reference Tool include the FAO and Profor, *Framework for Assessing and Monitoring Forest Governance*; IUCN, *Legal Frameworks for REDD: Design and Implementation at the National Level*; Baker & McKenzie and Covington & Burling LLP, *Background Analysis of REDD Regulatory Frameworks; and* ICV, Imazon and WRI, *The Governance of Forests Toolkit (v.1).* VIII As illustrated in the table at **Annex 1**, however, the primary source for the Reference Tool is the Cancun Agreements themselves, which contain numerous provisions that can be grounded in a range of concrete legal instruments. **Figure 2** summarizes select provisions of the Cancun Agreements, which are reproduced in the Reference Tool along with correlated legal instrument options. The Reference Tool should be referred to as desired by the reader for informational purposes in reviewing this Country Study.

# Figure 2: Summary Cancun Agreements Provisions for Legal Preparedness for REDD+

- Ensure that REDD+ activities are used to enhance other social benefits
- Fully respect human rights
- Address the drivers of deforestation and forest degradation
- Develop a national REDD+ strategy or action plan
- Develop national forest reference emission levels and/or forest reference levels
- Develop national MRV systems
- Develop information systems on how the safeguards are addressed and respected
- Promote and support transparent and effective national forest governance structures, taking into account national legislation
- Address land tenure issues
- Address gender considerations
- Promote and support actions to address the risk of reversals

- Promote and support actions to reduce the displacement of emissions
- Promote and support multiple forest functions
- Undertake activities consistent with national sustainable development needs and goals
- Promote and support that actions complement or are consistent with international agreements
- Promote and support that actions complement or are consistent with national forest programmes
- Undertake activities to be consistent with adaptation needs
- Undertake activities that are results-based
- Promote and support the knowledge and rights of indigenous peoples and local communities
- Promote and support the full and effective participation of relevant stakeholders in para.
   70 activities and developing and implementing national REDD+ strategies or action plans

#### 2.3 Breadth of laws and institutions reviewed

This Country Study reviews laws and institutions that have a direct or indirect bearing on REDD+. Therefore, not only is the forest sector considered but also crosscutting issues of land tenure, land use planning, protected areas, easements, land acquisitions, and trade and commerce as well as sectoral laws concerned with the drivers of deforestation and forest degradation, such as energy, agriculture and mining (see **Annex 2 "Government of Mexico Laws Reviewed"**). The breadth is wide because laws create rights, responsibilities and hierarchies in interests that affect issues such as carbon ownership and use, the risk of reversals and displacements, participatory decision-making, and results-based benefit distribution. Gaps and conflicts in institutional mandates may also result in the absence of action, duplication of efforts or cancelling out of positive initiatives where actors work at cross-purposes.

# 3 Situating REDD+ within Mexico's Governance Framework

## 3.1 Mexico's federal legal and governance system

Responsibility for the environment is shared between the Federal and State governments in Mexico. Among its many provisions, the PoliticalConstitution for the United Mexican States governs the use of lands, water and air. It allows the Federal Governmentto impose limitations on private property as required by public interest considerations, such as regulating the use of natural resources for the benefit of society to ensure a more equitable distribution of public wealth, to conserve natural resources andto achieve balanced national developmentand the improvement of urban and rural living conditions. Viii Therefore, the Federal Government is responsible for

establishing provisions, uses, natural reserves and objectives for the exploitation of lands, water and forests. It must also legislate to preserve and restore ecological equilibrium; to lay out the legal organization and management of *ejido*sand common lands; stimulate the development of small rural property; promote agriculture, livestock farming, silviculture and any other kind of ruraleconomic activity; and to prevent the destruction of natural elements or property which may prejudice society. ix

Laws issued under the Federal Government's jurisdiction that are pertinent to REDD+ include the General Law of Ecological Equilibrium and Environmental Protection, theOil and Gas Law, theLaw for Use of Renewable Energy Sources, the Law on Sustainable Rural Development, theGeneral Law of Sustainable Forest Development, the Law on Planning, the Law on Planning, the Mexican Constitution reserves the residual constitutional powers — i.e., those not expressly granted to the Federal government — for the States. The States are also granted their own limited powers, including participation in the establishment and administration of protected areas and power over land use inside their jurisdiction, among others.

The Constitution also mandates that Federal Congress has the authority to issue laws that establish concurrent competencies of the Federal Government, States and Municipalities in the area of environmental protection and the preservation and restoration of ecological equilibrium. \*\*Relevant divisions of jurisdiction are elaborated in the General Law of Ecological Equilibrium and Environmental Protectionand theGeneral Law of Sustainable Forest Development. The former grantsStates the ability to undertake their own State environmental policies, environmental laws in areas of State jurisdiction, establish protected areas, undertake environmental impact assessment of certain works and activities and enter into agreements with the Federal Government to devolve certain environmental competencies to the States. \*\* The latter grants the States the right to establish forest policies, enforce federal and local laws pertaining to forests, elaborate large scale regional forest and forest-watershed policies, promote forest ecosystem goods and services, create economic instruments to promote sustainable forest development, and promote the direct participation of the owners and holders of forest resources inprotection, conservation, restoration, monitoring, management, use, cultivation, processing and marketing of those resources.\*\*

Recent legislative efforts include a proposed General Law on Climate Change, which would amend more than 30 existing laws and regulations, including the General Law of Ecological Equilibrium and Environmental Protection and the Law for Use of Renewable Energy Sources. A general law may make compliance with climate change obligations simpler, and may provide guidance for Mexican authorities in terms of policies, strategies and goals for climate change mitigation and adaptation, and evaluation and follow-up processes. However, because of the length of the legislative process, it may make more sense to to simply implement existing laws. The proposal does recognize that climate responsibility is shared among the Federal, State and municipal governments. Recognition of this joint responsibility reflects the sub-national trend where States have developed a diverse portfolio of climate laws and policies, given their jurisdictions and the lack of a federal climate lawpre-empting local efforts. To date, Mexico City, xxiii Veracruz and Chiapas have each enacted their own climate laws. The State authorities of the Yucatan Peninsula(Campeche, Yucatan and Quintana Roo)have also enacted a regional climate agreement, the Yucatan Peninsula Accord, to develop regional mitigation and adaptation responses. Each State level response highlights innovative approaches to climate law, demonstrating the potential for diverse legal and policy solutions at sub-national levels, and the value of tailored legal and institutional responses to climate change. In further sections of this Report, the need to coordinate local, regional and State responses in the next Federal approach to climate change is discussed in more detail.

# 3.2 Mexico's development goals related to REDD+

The Cancun Agreements state that REDD+ activities should be undertaken in accordance with national development priorities, objectives, circumstances and capabilities and should be consistent with sustainable development needs and goals. xxiv Mexico's long-term development goals of relevance to REDD+ include: legal certainty, confidence in public institutions, establishing a culture of legality, respect for human rights, increasing economic competitiveness and generation of employment (especially in the rural sector and regional development), equality of opportunity (including poverty reduction, integrated development and involvement of indigenous communities), environmental sustainability (including biodiversity, forests and rainforests, environmental management and environmental justice, and climate change), and increasing the effectiveness of the democratic process (including through transparency and accountability). Mexico's ranking in the HDI is significantly lower than its potential, due to significant disparities in the distribution of wealth and basic social benefits. The rural areas, which suffer from the greatest disadvantages, are often the locations where REDD+ activities will occur. This emphasizes the potential for significant development gains to be made. As part of its objectives on environmental sustainability, Mexico has created the Ordenamiento Ecologico del Territorio, a policy that could play a significant role in REDD+ implementation. It allows the government (federal, state and municipal) to plan land use from a long term perspective so that certain areas are developed or cared for in the following years according to the program.

#### 3.3 International commitments of Mexico relevant to REDD+

The Cancun Agreements promote and support that REDD+ activities complement or are consistent with the objectives of relevant international conventions and agreements. \*\*CM\* Mexico is a signatory to numerous international treaties that may influence how Mexico's federal government and relevant State government authorities undertake to advance REDD+ policies and programs. These include: (a) the UN Framework Convention on Climate Change regime, which features the Cancun Agreements and REDD+ Activities, Guidance and Safeguards; (b) the UN Convention on Biological Diversity (UN CBD), which includes work programmes on forest biodiversity; (c) the UN Convention to Combat Desertification and Drought (UN CCD), which speaks to the need for Parties to ensure sustainable forest management, afforestation, reforestation and soil conservation; (d) the International Tropical Timber Agreement, which enjoins parties to promote sustainable management of tropical timber producing forests; and (e)the Ramsar Convention, which supports conservation of nature reserves for forested wetlands.

Mexico is also a signatory to human, indigenous and women's rights treaties that may inform the social aspects of REDD+ activities, including the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICECSR), the Indigenous and Tribal Peoples Convention (ILO Convention No. 169), the Inter-American Charter on Human Rights, the UN Convention on the Rights of the Child, the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the International Convention on the Elimination of All Forms of Racial Discriminationand the Universal Declaration of Human Rights.

Further, Mexico has been very active in the development and adoption of "soft law" Declarations such as the 1992 Rio Declaration on Environment and Development and Agenda 21, the 2002 Johannesburg Declaration and Plan of Implementation from the World Summit on Sustainable Development, and the UN Declaration on the Rights of Indigenous Peoples, which provide guidance for the country's steps in sustainable development law and policy.

# 3.4 Human and indigenous peoples rights in Mexico

The Cancun Agreements emphasize that Parties should fully respect human rights in all climate change actions. Furthermore, the Agreements safeguard the knowledge and participation of local communities and indigenous peoples in planning and undertaking REDD+ activities. \*\*x\*v\*i\* Mexico's accession to numerous international treaties on human and indigenous rights, mentioned above, defines the substance of how it must undertake compliant REDD+ activities. At the national level, the Mexican Constitution contains a Bill of Rights with extensive human rights provisions. The Bill of Rights recognizes that every person is entitled to fundamental rights and freedoms of the individual, whatever his race, place of origin, political opinions, colour, creed, sex or marital status. This includes protection from deprivation of property without compensation, and other basic human rights such as the right to life, freedom of association and freedom of expression.

Three areas of human rights that merit increased attention in Mexico, including for REDD+ projects, are the equal treatment of women, youth and indigenous peoples. Mexico is a signatory to the ILO Convention No. 169. This treaty contains important provisions to protect the property, culture, laws and institutions of indigenous peoples, In terms of relevant "soft law." As the UN General Assembly has done, Mexico has adopted the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) and the 1992 Rio Declaration, which recognize customary international legal rights of indigenous peoples against forced relocation and their right tofree, prior and informed consent (FPIC) over matters that affect them. \*\*EXXVIII\*\* These international human rights instruments can also inform the way that REDD+ will be implemented in Mexico.

# 3.5 Public participation in decision-making and access to information in Mexico

The Cancun Agreements safeguard the full and effective participation of relevant stakeholders, particularly local communities and indigenous peoples, in developing and implementing national REDD+ strategies or action plans. In addition, they call for transparent national forest governance structures and systems of information on how the Safeguards are being addressed and respected. \*\*Example Several\*\* international agreements to which Mexico is a signatory define the manner in which it must engage stakeholders in decisionmaking and provide transparent, timely and accurate access to information. For instance, the ICCPR stipulates that every citizen shall have the right and opportunity to participate, without distinction and without unreasonable restrictions, in the conduct of public affairs, directly or through freely chosen representatives. \*\*Exist\*\* In terms of \*\*soft law,\*\* the UNDRIP also recognizes that indigenous peoples have the right to choose their modalities of participation and the right to participate fully "through representatives chosen by themselves in accordance with their own procedures." \*\*Exist\*\* A number of other treaties recognize participatory approaches specific to environmental decision-making, such as the UNCCD, CBD and Ramsar Convention. \*\*Eurthermore\*\*, Agenda 21 specifies the need of individuals, groups and organizations to be consulted in EIA processes. \*\*Exist\*\*

# 4 Review of Existing Laws and Institutions Impacting REDD+

#### 4.1 Overview

In Mexican law, climate change is relevant to many regulatory sectors and institutions, andit is important to secure integration of many objectives. High-level inter-sectoral policy guidance has proven important at the design,

reform and implementation stagesof regulations on REDD+. As a subset of legal and institutional responses to climate change, various cross-sectoral aspects of REDD+ are being undertaken by authorities in most relevant sectors includingforestry, agriculture, environment, energy, water, extractive industries, trade, investment and finance, among other areas.

This review of existing laws and institutions of relevance to REDD+ employs the **Annex 1** reference tool to identify the legislative provisions and jurisdictional mandates most pertinent to REDD+ in the following issue areas: (s.4.2) climate change strategies; (s.4.3) land use, tenure and management; (s.4.4) forestry; (s.4.5) environment; (s.4.6) energy and electricity; (s.4.7) trade, investment and financial accountability. Various gaps, barriers, challenges and opportunities will be briefly mentioned throughout, leaving an in-depth analysis of key challenges and innovations to Sections **5** "Key Challenges to Legal Preparedness for REDD+" and **6** "Innovative Laws and Institutions Impacting REDD+."

# 4.2 Climate Change Strategies

The *Programa Especial de CambioClimático 2009-2012* (PECC), published in August 2009, sets out Mexico's long-term climate change agenda and provides medium-term goals for adaptation and mitigation. The PECC recognizes that, as one of the world's most biodiverse countries, Mexico has great potential to benefit from mitigation measures related to the conservation and sustainable use ecosystems and ecosystem services, including REDD+. The PECC asserts that adequate forestry policies could both compensate for increasesin CO<sub>2</sub> emissions from other sectors of the Mexican economy andoffset emissions from other countries, making this one of Mexico's most important mitigation options in the short and medium term. As a result, the PECC highlights several key objectives and measures to promote conservation, and carbon capture and storage, in the forestry sector. \*\*

\*\*EXAMPLE CONSTRUCTOR \*\*

\*\*Constructor Constructor Construc

In 2007 several sub-national (state) governmentsalso began to develop their own climate action plans (PEACCs) to provide a localized response to the effects and opportunities of climate change and to complement the Federal PECC. Nuevo Leon xxxiv and Mexico City xxxv adopted policies and laws which make reference to forest conservation, but primarily as a form of climate mitigation and adaptation, due to the nature of their economies and climates. Veracruz took up aleadershiprole, pilotingthe development of the PEACC xxxv and enacting the first sub-national climate law in Mexico that contains specific obligations related to REDD+. XXXVIII Chiapas has also successfully differentiated itself, through the adoption of Constitutional provisions related to climate change and vigorous promotion of REDD+ strategies and programs. XXXXVIII As the economic nature and development needs of a State can be addressed, in accordance with subsidiarity, through sub-national regulatory responses, these developments are particularly relevant.

The state governments of Veracruz, Chiapas and Yucatan have adopted laws and policies on climate changewith strong REDD+ components. \*\*xxix\* As objectives, these frameworks focus on the need to enhanceforest conservation within communities and promotethe sustainable development of rural and indigenous communities inhabiting forests. The REDD+ mitigation responses are structured to recognize the opportunities provided by carbon markets and ecosystem economics to provide for their own populations. \*\*However, several of these laws lack the specificity required to develop REDD+ further. \*\*Ii Considering that the Mexican Congress is expected to pass a General Law on Climate Change, the lack of specificity in the State-level laws could complement the national requirements laid out in a REDD+ chapter of the new law, or in a furthertailored national law addressing REDD+.

The Climate Change Law of Veracruz, among its mitigation criteria, establishes the necessity to preserve and enhance carbon sinks through the reinforcement of current deforestation and degradation programs. xlii It

establishes as a policy criterion a zero deforestation rate, and it emphasizes the role of Payment for Ecosystem Services (PES) for the conservation and sustainable management of State forests. Through this provision, Veracruz has initiated a process for a REDD+ scheme. However, the regulatory decree to provide further detailsnecessary for the development of REDD+ within the State, to address specific and basic issues such as defining what is considered to be carbon or what are eligible lands, is not yet in place. \*\*IiiiIt has also been very difficult for Veracruz to secure predictable, coordinated financial resources to implement its climate change strategies.\*\*

Chiapas's climate law was enacted in 2010, shortly after the adoption of the climate law in Veracruz. While its text appears largely to be based on a model similar to the climate law of Veracruz, Chiapas successfully differentiated itself through strong promotion of REDD+ strategies at the state levelthrough its PEACC, xlv and also within its law. xlvi Forest conservation and carbon sinks are the guiding criteria of the state's climate change action plan. Its climate change responses have, with other factors, attracted many carbon investors. As a state, Chiapas suffers from significant rural and indigenous poverty; its policy framework and laws also govern one of the largest carbon sinks in Latin America: the Lacandon Rainforest. Cutting-edge legal and policy responses adopted in Chiapas, together with successful efforts to promote the state as a destination for climate finance, resulted in its selection as one of CONAFOR's three pilot REDD+ projects. xlvii Implementation of such projects, however, must still be based on the further elaboration and enforcement of a coherent legal framework which addresses basic elements of REDD+ such as the nature of eligible lands, inclusive dialogues and participation of affected communities, the legal status of credits, and above all, the establishment of clear safeguards. xlviii Careful attention to safeguards is key for the success of REDD+ among communities in which social and economic discontent has generated indigenous uprisings such as the Zapatista Movement of 1994. xlix

The Yucatan Peninsula Accord is distinct from other Mexican sub-national responses to climate change, and it is the first Regional Climate Agreement in the country. The states that comprise the Yucatan Peninsula (Campeche, Yucatan and Quintana Roo) joined efforts to pool the resources of all three states to develop a coordinated response to climate change in a region that shares ecological systems, communities and vulnerabilities. The Yucatan Peninsula Accord strikes the right balance between regional cooperation and the respect for the autonomy of subnational governments, and itcommits the states to create a climate fund for the Peninsula, to develop a regional adaptation strategy and to facilitate a regional REDD+ programme. While discussions for the creation of the regional REDD+ initiative are ongoing, the Accord sets outthat it will include institutional reforms to reinforce community planning and forest management; benefit sharing distribution mechanisms; and the creation of monitoring, reporting and verification (MRV) methods. The Yucatan Peninsula's REDD+ initiative is another of CONAFOR's three REDD+ pilot projects and is beingimplemented with the support of The Nature Conservancy. The development of the policy raises questions about which provisions to consider in developing a REDD+ legal framework. Although it is novel, the Accord demonstrates that regional REDD+ schemes are worthy of consideration, especially for states with similar vulnerabilities and mitigation opportunities.

### 4.3 Land Use, Tenure and Management

## 4.3.1 Overview

Interests in land are diverse and are often regulated by separate legislative mandates, for instance for agriculture, natural resource management and land use planning. This section will address those laws and institutions with a bearing on land use, ownership and management, with the exception of the forestry sector and integrated environmental management for which in-depth reviews are provided at **Sections 4.4 and 4.5**, respectively. Thefollowing subsections consider, in particular: Land tenure (s.4.3.2); Land use planning (s.4.3.3); Mines and

petroleum extractive industries (s.4.3.4); Agriculture (s.4.3.5); Water resources management(s.4.3.6); and Protected areas and community-based natural resource management (s.4.3.7).

It should be noted that Mexico, in collaboration with FAO, has recently conducted an Integrated Land Use Assessment (ILUA). This assessment has provided essential information on trends across landbased natural resources, albeit through the extrapolation of select samples to the national level. These ILUAs endeavor to calculate carbon volumes by tree species as a reliable foundation for national baselines, forest reference levels and/or forest emission reference levels, although calculations for the purposes of additionality may also incorporate historical data and future land use projections, depending on methodologies to be decided by the UNFCCC.

#### 4.3.2 Land tenure

#### Historical foundations of land tenure

Land tenure is a crosscutting issue that can have a major influence on the effectiveness of REDD+ because it defines the right to own, use and manage the lands on which forests are situated. The legal and institutional framework for land tenurein Mexico straddles a colonial past, sovereignty and contemporary requirements of socio-economic development. After the 1910 Mexican Revolution, Mexico initiated a process of land redistribution that lasted from 1915 to 1992. As a result, land tenure does not present the same hurdles to REDD+ as it does in some other countries. However, indigenous peoples still suffer from insecurity of tenure rights due to societal inequity. Extreme poverty, violenceand third party pressure has forced many indigenous communities to sell their ancestral lands, thereby increasing private ownership over historical territories to the present day. Evidence of this inequity and its potential to exacerbate pre-existing challenges was debated in the Inter-American Human Rights system as Mexico's national REDD+ strategy was being developed.

Pre-existing inequity underlines the importance of enacting strict measures or safeguards to ensurethat the tenure rights of indigenous communities are respected in the development of REDD+ projects. CONAFOR is currently engaging indigenous communities, *ejidos*, NGOs, the private sector, academia and the National Commission for the Development of Indigenous Peoples (CDI) in an important stakeholder participation process in the development of the national REDD+ strategy. Mexican law on indigenous peoples relevant to land tenure of importance for REDD+ includes international declarations, agreements, and the rights and obligations found in national legal system (i.e. the Constitution). Through its signature of the 1948 Universal Declaration of Human Rights, the ICESCRand the ICCPR, Mexico has acquired international responsibility regarding indigenous communities and their land tenure. Mexico has recognized the right of any person that belongs to an ethnic or religious minority to participate and enjoy the cultural life of its community in such a way that his or her moral and material interests are respected. In the constitution of the such as acquired interests are respected.

At the same time, through itssignature of the 2007 United Nations Declaration on the Rights of Indigenous Peoples, the Mexican government adopted the resolution of the General Assembly of the United Nations to implement assistance programs that would ensure, without any discrimination, indigenous populations' enjoyment of their rights to the conservation and protection of their environment and the productive capacity of their lands or territories and natural resources. In the early nineties, the adoption of the obligations of the 1992 Convention on Biological Diversity and Convention 1690f the International Labor Organization reflected Mexico's recognition of the intrinsic relationship that exists between the usage of natural resources and the uses and customs of indigenous peoples to promote their sustainable development and to ensure the respect of their local knowledge and practices. In the case of their local knowledge and practices.

Following the signature of the 1996 San Andrés Accords, the 2001 amendments to the Constitution of Mexico include,in Article 2, recognition of the rights of indigenous communities to decide upon the conservation and management of their land and habitats per the parameters established within the Constitution. The amendments to Article 2 further include the recognition that indigenous communities can manage and use natural resources found within their territories under the forms and modalities established in Article 27 of the Constitution. Iix

Article 27 constitutes the basis of land law in the country and it guarantees the protection of the integrity of indigenous lands. <sup>Ix</sup>It is establishes that the Nation is the original owner of lands and water sources found within Mexican borders, making Article 27 the legal foundation for the allocation of private and public property in Mexico. It further establishes the basis for communal property through its legal formalization of *ejidos*, which are described in further detail in the next section of this report. These constitutional legal rights and obligations are particularly relevant to REDD+. In 2007, temperate and rain forests covered 65,267,000 ha, or 33.57% of Mexico's total land mass, and were mostly communally owned. Specifically, 45,471,000 ha (69.67%) belonged to agrarian communities and *ejidos*,16,916,000 ha (25.92%) of forests were privately owned and 2,880,000 ha (4.41%) of forests were in public hands. <sup>Ixi</sup>

Article 27 of the Constitution establishes as well who can acquire property in Mexico. Acquisition of private property by foreigners needs to follow specific requirements. These requirements are related to the areas where foreigners cannot acquire property and the acceptance of national jurisdiction for their acquisition and enjoyment. Expropriation can only proceed for public utility causes and by means of compensation. To safeguard the public interest, Article 27 also ensures that the Nation reserves the right to impose specific modalities to private property to pursue specific aims to enhance the livelihood of the population and foster its development. Article 27 establishes that the Nation shall enactregulations ensure an equitable share of the benefits from the use of natural resources as well as its conservation, to enhance the livelihoods of the population. For the purposes of this report, it is worth mentioning that Article 27 requires the Federal Government to impose every necessary measure to ensure the sustainable use of forests and the preservation and conservation of the environment. This constitutional mandate is the legal foundation for the regulation of forests through the General Law of Sustainable Forest Development.

#### Present de jure and de facto land tenure

Land tenure is ruled in Mexico by the Federal Civil Code and the Civil Codes of each state. However, due to the nature of forest lands, the rules to transfer their property, use and usufruct are treated with special consideration under article 61 of the General Law on Sustainable Forest Development. According to this article, the transfer of property, use and usufructuary rights of forest lands is a procedure that needs to take place in front of a Public Notary. It requires the presentation of specific documents linked to the management of the terrain such as the authorization of land use change, its forest management programme or its commercial forestry plantation management programme. Every act is registered in the National Forest Registry even if they have been registered as well in the National Agrarian Registry, and whoever acquires the land needs to fulfill every obligation linked to forest management, environmental impact or derived authorizations. If the land contains an area of special protection, thismust be disclosed to the acquirer or to the authority that is in charge of the operation and must be included in the deed. Ixii

Article 61 establishes as well that the rights related to the extraction of forest products (timber and non-timber products) can be transferred in their entirety or in part to third parties. Whether carbon rights fall within this

category is a matter that needs to be analyzed inthe design of the current REDD+ strategy. If the rights for the extraction of forest products are linked to rainforests larger than 20 ha, to areas with forest species of difficult regeneration or to natural protected areas, it is required to obtain SEMARNAT's pronouncement upon the authorization of these rights given the necessity of environmental impact assessments for the development of any productive activity that takes place in these areas. |xiii|

These contracting requirements apply to all landowners whether they are private or communal. However there are certain requirements that need to be taken into consideration to transfer and acquire forest rights that belong to Mexico's communal property system: the ejidos. According to the Federal Constitution and the Agrarian Law, ejidos have legal personality and have certain rights over land that has been allocated to them or that they have acquired through any other act. Ixiv They operate according to their own rules of procedure, which include the grounds for their economic and social organization, the requirements for the inclusion of new communal landholders or ejidatariosin the organization and the rules governing management of common property. Ixiv

The lands within an *ejido* are divided into lands for human settlement, lands for common use and the plots of the *ejidatarios*. The plots of each *ejidatario* cannot be larger than 5% of the total surface of the lands within the *ejido*. Lavii Association and use contracts can be undertakenoncommon use lands. If the use contracts are concluded with third parties, their duration depends on the productive project that will take place onthose lands. Their duration cannot exceed 30 years but they can be extended if circumstances require. This gives a timeframe for the development of any REDD+ projects.

Any new contracts agreed with third parties for the use of common use lands need to be approved by the assembly of the *ejido*. Ixix The assembly is the most important institution in the *ejido* and gathers the participation of every *ejidatario*. It creates the rules of the *ejido* (Reglamentos Internos Ejidales ) and thus plays a very important role in land management. It is in charge of establishing the exploitation regime of the lands of common use, of distributing the profits among the members of the *ejido*, of authorizing any division of the *ejido*, of authorizing its fusion with any other *ejidos*, of recognizing the plots of the *ejidatarios*, of allowing the *ejidatarios* full dominion of their individual plots and for the extinction of the *ejido* following the petition of its inhabitants. Because of these powers, many REDD+ activities could be implemented thru the rules mandated by each *ejido* and guaranteeing benefits-sharing of REDD+ payments.

If the *ejido* ends its existence, the *ejidatarios* gain full dominion over their plots except if they are situated in forest or rainforest lands. If this occurs, forest and rainforest lands return to National ownership. This is of particular relevance tothe development of any REDD+ contracts with carbon credit buyers becausethe extinction of the regime would immediately designate a new owner of the forest lands. The protection of forests and rainforests is also found in the prohibition to allocate any new plots in forests or rainforest terrains and in the restriction onacquiringany *ejidatario* rights upon any forest or rainforest terrain, even if the possessor of the land has fulfilled the requirements for the recognition of his *ejidatario* rights through prescription.

Association and use contracts can also be established with the *ejidatarios* regarding their own plots. Article 45 of the Agrarian Law establishes that if the use contracts are signed with third parties, their duration depends on the project and cannot exceed 30 years, but thiscan be extended upon request. The *ejido* and the *ejidatarios* can offer as security the usufruct of the common use lands and of their assigned plots to the financial institutions or the entities with which they will have any commercial relations. If the guaranteed obligation is not fulfilled, the usufruct will be valid only for the agreed timeframe. They can also develop guarantee funds to offer security for their financial obligations. Lastly, the *ejidatarios* and the *ejidos* can associate in unions, rural associations of

collective interest or any other type of commercial or civil association to develop their social and economic activities within their lands. It is an important clause to take into consideration for joint action regarding REDD+.

## 4.3.3 Land use planning

#### Existing land use planning regime

Land use planning has a strong bearing on REDD+ implementation as it defines a hierarchy of land use rights that affect forest management. The existing land use regime in forests is established primarily by Agrarian Law and the Law for Sustainable Forest Development, as well as State laws on the matter

Article 116 of the Agrarian Law establishes that there are only three types of land:land for agriculture, land for livestock and land for the productive use of forests or rainforests. If a land does not have any productive vocation, it is considered to be reserved for agricultural purposes. There have been several proposals to amend this article and include the conservation of land as an economic activity in coherence with the General Law on Sustainable Forest Development andarticle 55 BIS of the General Law of Ecological Equilibrium and Environmental Protection. This is an issue that will need to be taken into consideration for the development of a legal framework for REDD+.

The Law for Sustainable Forest Development first influences land use planning by establishing broad objectives for forest policy; notably, it must promote the development and adequate planning for the sustainable development of forests. Sustainable forest development is understood as a process that can be assessed through criteria and indicators relating to environmental, sivicultural, economic and social characteristics, which seeks to establish optimal and sustainable productivity of forest resources without compromising the yield, equilibrium and integrity of forest ecosystems. The criteria evaluate whether the development improves the income and quality of life of the persons participating in forest activities, promotes added value in forested regions, and diversifies production options and creates sources of employment in the sector. This mandate forms the basis of the forestry in Mexico and directly influences the use of forested lands.

Forest zoning is one of the bases upon which land use management is undertaken in Mexico. The law mandates that the National Forest Commission, in coordination with the States, shall identify forest management units, preferably based on river basins, watersheds and forest sub-watersheds, in order to achieve sustainable forest management, orderly planning of forest activities and the efficient management of forest resources. The commission and State governors will promote the organization of the holders of forest approvals whose terrains are located in a forest management unit. Identify the promote that the property is a province of the holders of forest approvals whose terrains are located in a forest management unit.

SEMARNAT's approvalis required to authorize land use changes in forest terrain, except with the prior technical opinion of the members of the State Forest Council concerned and supporting technical studies which demonstrate that proposed changes will not compromise biodiversity, nor provoke the soil erosion, the deterioration of the quality of water or diminution of its capacity, and that the alternative land use proposed is more productive in the long term. The studies must be considered together, rather than in an isolated manner. In its authorizations, SEMARNAT must give sound responses to the proposals and comments made by the State Forest Council. Authorization cannot be given for burned lands until twenty years have passed unless it can be convincingly shown that the ecosystem has fully regenerated. SEMARNAT must also coordinate, with the participation of the National Forest Commissionand the Ministry of Agriculture, Livestock, Rural Development,

Fisheries and Food, a land use policy to stabilize agricultural use, including slash and burn practices, and to prevent the continued growth of agricultural production at the expense of forest land. IXXXIII

#### 4.3.4Extractive industries

The laws governing mining, mineral exploitation and hydrocarbon extraction are relevant to REDD+ implementation insofar as subsurface rights often take precedence over land and forest management and can thereby cause reversals or displacements and compromise results-based payments to persons involved in forest management.

Mining is subject to Federal jurisdiction and is operated on a concessionary basis. The 1992 Mining Law of Mexico and its Mining Act Regulationsregulate mining concessions. While a concession gives its holder the right to carry out mining work in the lot covered by the concession and take ownership of any minerals, it does not grant any surface access rights, which must be negotiated separately with the owner of the surface land. If no agreement can be reached with the surface owner (typically for the purchase or lease of the surface land), the concessionaire can apply to the General Mining Bureau for the expropriation or temporary occupation of the land, which will be granted if the land is indispensable for the development of the mining project. Consideration, payable on a one time basis for expropriation and on a yearly basis for temporary occupation, is set based on an appraisal of the affected land. Environmental laws require the filing and approval of an environmental impact statement for all exploitation work, and also for exploration work that does not fall within the threshold set by the Federal Government for mining exploration.

Oil and gas activities in Mexico are subject to Federal jurisdiction. The most relevant statutes are:the Oil and Gas Law; the Natural Gas Statutory Law, the Liquefied Petroleum Gas Statutory Law, the PEMEX Act, the Statutory Mining Law on Carbon Associated Gas, the Energy Regulatory Commission Act;the Hydrocarbons National Commission Act;the Public Works and Related Services Act;the Public Acquisitions, Leases and Services Act; andthe Foreign Investment Act. The Oil and Gas Law could cause difficulties for the certainty of REDD+ projects because of the potential for precedence of subsurface over surface rights. In particular, the Act notes that surveying and exploration for petroleum only requires permission from the Secretary of Energy, and if there is opposition from the owner, the possessor orthe legal representatives of *ejidos*or communities, the Secretary of Energy, after listening to the parties, will grant the permit while recognizing that PEMEX is obliged to indemnify the affected persons for damages and prejudice which may be caused, in accordance with their commercial value. Nowith However, the Act also requires that, with the goal of promoting the sustainable development of activities that take place in accordance with the law, criteria must be followed to promote the protection, restoration and conservation of ecosystems.as the Act also requires strict compliance with the laws, regulations and norms applicable in the fields of the environment, natural resources, waters, forests, biodiversity and fisheries.

#### 4.3.5 Agriculture

According to the UN-REDD Programme documents, agriculture may be a significant driver of deforestation and forest degradation inMexico. Agricultural practices are managed on smallholder lands allocated by the traditional administration and through leasehold ownership on State lands. Although a forthcoming UN-REDD Programme study on the drivers of deforestation and forest degradation will provide more detail, many studies attribute the contribution of agriculture to deforestation and forest degradation to the expansion of smallholder plots on customary and State lands, including protected areas, to meet sustenance needs due to low productivity.

Mexico's Agricultural Lawis oriented toward the promotion and development of agriculture in Mexico, through the implementation of Article 27 of the Mexican Constitution. The Federal Government is tasked with promoting productive activities and social action in rural areas. This includesensuring the care and conservation of natural resources and promoting their rational and sustainable use to preserve ecological equilibrium, and foster the improvement of production conditions and, where appropriate, participating in infrastructure works and investment to improve the potential and suitability of lands for the benefit of rural residents and farm workers. This also includes establishing the conditions for channeling investment and credit to allow for the capitalization of agriculture, promoting associations for productive purposes and carrying out actions that foster regionally balanced social development of the rural sector. Ixxxxvii

Thus, agricultural laws and policies in Mexico arerelevant to REDD+ because they support landuse policies that promote deforestation and forest degradation and the continued expansion of the agricultural frontier. This makes agricultural law one of the key areas of reform needed for an effective REDD+ mechanism, given that the laws and policies are working at cross purposes.

#### 4.3.6 Water

Water resources management represents one of Mexico's most urgent environmental challenges; there has been been unsustainable exploitation of both surface and groundwater resources in many areas. However, Mexico also has a long history of legal and policy measures to strengthen management of waterdating back to the 1930s, which havelead to the existence of a significant legal and institutional framework. Article 27 of the Mexican Constitution gives the Nation sovereignty over many water resources, including territorial seas; interior marine waters; lagoons and estuaries' thatflow either permanently or occasionally into the sea; interior natural lakes directly linked to constant streams; rivers; and direct and indirect tributary streams which form a natural border or crossbetween jurisdictions. It also includes springs welling out at the nation's shores, marine zones, riverbeds, lakes, lagoons and estuaries, as well aswater extracted from mines. Any other waters are considered an integral part of the property through which they flow or in which they are deposited, but if they are located intwo or more properties, their utilization shall be deemed a matter of public use and therfore shall be be be a matter of public use and therfore shall be be a proper to be a support of the state. In the support of the properties of the support of the state.

The National Water Law hoxxviii implements the provisions of Article 27 relevant to water resources management. It creates a National Water Commissionwhich undertakes its activities through Watershed Organisations. In addition to providing a integrated framework for water management across Mexico, the National Water Commission has authority over hydraulic infrastructure works financed by the Federal Government, such as dams; levees; vessels; canals; drains; levees; ditches; aqueducts; irrigation districts or units; and other works built for the exploitation, use, development, flood control ormanagement of national waters, along with the land they occupy and related flood protection zones. The Commission also regulates the use of water for electricity generation and oversees all water assignments or concessions.

#### 4.3.7 Protected areas and community-based natural resource management

Protected Areas are primarily regulated by the General Law on Ecological Equilibrium and Environmental Protection at the Federal level. It holds that areas in national territory where the government exercises sovereignty and jurisdiction, where the original environments have not been significantly altered by human activity, or wherethey require preservation and restoration, are subject to the legal regime established by the Law and its regulations. Protected areas are established by decrees that constitute the areas. Owners, possessors or holders of other rights to land, water and forests within protected areas are subject to the modalities of the law and various

provisions contained in the corresponding environmental management program. xciii

The establishment of protected areas can be for the purposes of securing the sustainable use of ecosystems and their elements; protecting villages, roads, industrial installations and agricultural uses next to forested mountain areas where streams originate; the hydrologic cycle in watersheds; or other motivations to protect surrounding environmental elements. \*\*xciv\*Biodiversity\* conservation is regulated by the General Wildlife Law\*\*cv\* and allows for the creation of bird and wildlife sanctuaries.

As a result, climate change authorities could carve outforested lands for REDD+ projects by designating them as protected areas, including National Parks, Bird or Wildlife Sanctuaries, or other zones. Additionally, Community-Based Natural Resource Management (CBNRM) on protected areas may provide a model for future REDD+ benefit distribution systems. Depending on the methodologies adopted by Parties to the UNFCCC, forests that have been subject to conservation measures in the past may or may not be eligible for REDD+ finance, due to concerns for additionality. Arguably, there is no additionality if areas under conservation would have been conserved regardless of REDD+ finance. In attempting to benefit from REDD+ to the greatest extent possible, Mexico may develop its baselines, national forest reference levels and/or emission levels using future predictions of deforestation and forest degradation that will likely affectprotected areas based on ongoing socio-economic trends as other countries have done, such as Guyana where there has been little deforestation to date. That said, protected areas have experienced at least some illegal encroachment, meaning that historical baselines might equally apply.

## 4.4 Forestry

#### 4.4.1 Overview

The foundation of Mexico's Federal forest laws is in Article 27 of the Constitution, which establishes that the Nation shall impose every necessary measure to ensure the sustainable use of forests and the preservation and conservation of the environment. This led to the establishment of the General Law of Sustainable Forest Development, which drives existing forestry laws and institutions.

#### Definitions of "forest" under Mexican Law

The regulatory decree of Mexico's General Law on Sustainable Forest DevelopmentXCVII provides one definition for Mexico's forests. Article 2.V defines a "forest" as a mass of forest vegetation that covers more than 1,500 m2 (0.15 h) that is mainly found in cool temperate regions. It focuses on spontaneous woody perennial species whose tree canopy density is greater than 10% of actual surface coverage, referring to the National Institute of Statistics, Geography and Informatics (INEGI) in order to further include all the types of forests that have been identified by Mexico's most important information office. XCVIII This definition could be understood as matching the definition of temperate forests and not the overarching concept of a forest. However, the regulatory decree also provides a second definition for rainforests. Article 2.XXXI of the regulatory decree defines a rainforest as a mass of tropical forest vegetation that covers more than 1,500 m2, with a strong predominance of spontaneous woody perennial species whose tree canopy density is greater than 10% of its actual surface coverage. This definition does not include acahuales. Acahuales are areas that had been previously used for agricultural and cattle purposes and that have been allowed to repopulate with native secondary vegetation before the next agricultural cycle. This exception attempts to foster greater coherence with Mexican agricultural laws. To complement its definition, the decree refers once again to the INEGI which has categorized many types of Mexican rainforest, mangrove and

palm groves.XCiXThe regulatory decree's provisions on "forests" and on "rainforests" must therefore be read jointly, in order to simply understand the legal definition of the overarching term "forests"in Mexico. The definitions of the regulatory decree have been consistently adopted by the Sustainable Forest Development laws of mostStates at the sub-national level.C

Michoacán's Sustainable Forest Development law provides a different legal definition of forests. According to its article 5.VII, a "forest" is defined as an association of forest vegetation primarily constituted by trees, shrubs, herbaceous vegetation, fungi, lichens and any other type of cold and temperate natural vegetation linked to the physical, chemical and biological characteristics of its soil and water. It is defined as the habitat of wild fauna and defining of the shape of natural landscapes.Ci There is no reference to acoverage areaor to any other official bodies for the completion of the definition.Regardless of the wide legal acceptance of the definitions of the regulatory decree, government entities, in practice, have operated under different meanings of the terms "forest" and "rainforest." The definitions of implementing bodies range from semantic reinterpretations of the definitions found in the regulatory decree to different interpretations of the terms based on international or scientific consent. The Secretary of Economy's Mexican Norm NMX-AA-SCFI-2008 provides a reinterpretation of the term "forest" through its guideline to certify the sustainable management of forests nationwide. It defines "forest"as forest vegetation found in "cool temperate and humid tropical" regions combining thus the original concepts of "forest"and "rainforest" as presented in the regulatory decree of the General Law on Sustainable Forest Development. This definition leads to doubt because it does not mention INEGI's classification of "rainforest," "mangrove" or "palm grove" as part of the norm's scope even if it refers to INEGI's forest types.Cii

The National Forestry Commission(CONAFOR) operates under INEGI's Data Dictionary of Vegetation and Land Use Chart as the basis of the Mexican National Forest Inventory. Ciiilt also follows FAO's Global Forest Resources Assessment (FRA) definitions to report on the state of Mexico's forests and forestry.INEGI's Land Use and Vegetation Cartographydefines a "forest" as arboreal vegetation of Northern origin (Holartic). According to this definition, forests are found in temperate and semi-cold regions with different degrees of humidity characteristic of the country's mountainous regions alongside the Sierra Madre Occidental, the Sierra Madre Oriental and the EjeVolcánico. A "rainforest," on the other hand, is defined by INEGI as arboreal vegetation of Southern origin (Neotropical) found in humid, subhumid and warm semidry environments. According to this definition, it comprises a large number of species among which vines, lianas, epiphytes and thorn trees can be found. Despite their differences, there is no semantic confrontation between INEGI's and the legal definitions described at the beginning of this section; they have been considered as complementary by the same decree. FRA's definition of"forest," however, presents an important semantic difference based on the surface coverage requirement. FRA defines "forest" as "[I]and spanning more than 0.5 hectares (5,000 m2) with trees higher than 5 meters and a canopy cover of more than 10 per cent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use." CİVINEGI's data can be easily transformed into FRA's equivalent and because the information is used mainly for reporting purposes, there is no direct policy effect. A different result arises from the definitions of forests that the Mexican government uses for its Payment for Ecosystem Services (PES) programme and Clean Development Mechanism projects with a forest component. According to Mexico's Preparatory Report on the Development of a National REDD Strategy, for the purposes of the Payment for Forest Ecosystem Servicesprogramme, its Technical Committee established that a forest would be land spanning in an area of more than 1 ha (10,000 m2), with a canopy cover of more than 10% and woody plants of at least 2 m high. The same Report describes an agreement between INEGI and Mexico's Secretary of Environment and NaturalResources (SEMARNAT) according to which for CDM afforestation and reforestation

projects, a forest would be land spanning an area of more than 1 ha (10,000 m2), with a canopy cover that exceeds 30% and trees that can reach a height of at least 4 m high.CV The important difference of these policy definitions in comparison to Mexico's legal definition may be a matter to take into consideration in the development of Mexico's REDD+ Strategy.CVi

The UNFCCC definition of "forest" adopted in states that a forest is "is a minimum area of land of 0.05–1.0 hectare with tree crown cover (or equivalent stocking level) of more than 10–30 per cent with trees with the potential to reach a minimum height of 2–5 metres at maturity in situ. A forest may consist either of closed forest formations where trees of various storeys and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10–30 per cent or tree height of 2–5 metres are included under forest, as are areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest." CVii It is apparent that reconciliation will need to take place between all of these different definitions to make sense of REDD+.

#### **CONAFOR** mandate and management methods

According to the Organic Law of the Federal Public Administration, there are three Federal Secretaries with specific competences related to forests: the Secretary of Environment and Natural Resources (SEMARNAT), the Secretary of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) and the Secretary of Economy (SE). Each of these secretaries ispart of Mexico's Intersecretarial Climate Change cviii and the Intersecretarial Sustainable Rural Development cix commissions, thus advancingforest concerns for coherent action under different policies. SEMARNAT has the competence to grant contracts, concessions, licenses, permits and authorizations related to forests. SEMARNAT also has the competence to recognize rights related to forests and their exploitation. Alongside SEMARNAT, SAGARPA has the competence to establish forest plantations according to the programmes designed by the federal and state governments. Exi SEhas the competence to design policy related to the industrialization, distribution and consumption of agricultural, livestock and forest products.

The rules of operation of SEMARNAT, of SAGARPA and of SE establish in further detail the competences of each of these Secretaries in relation to forests. However, agencies that operate under SEMARNAT have been considered as most relevant for forest management. These include the National Commission for Natural Protected Areas (CONANP), the National Biodiversity Commission (CONABIO), cxiii the National Institute of Ecology (INE), cxiiv the Federal Environmental Protection Agency (PROFEPA), cxiv the National Water Commission (CONAGUA), the Subsecretary of Environmental Planning and Policy and the National Forest Commission (CONAFOR). The latter is the main federal agency in charge of the development and implementation of forest policy in Mexico and is the national REDD+ focal point.

The Law on Sustainable Rural Development establishes that CONAFOR will provide necessary support and compensation for the conservation of environmental services. Under the general definition of environmental services, the latter also implies the promotion of carbon sequestration schemes by CONAFOR. CXVIII The Law on Sustainable Rural Development establishes that the Federal government shall promote economic activities in rural settings to increase the income of farmers through PES schemes. CXXIX The federal, state and municipal governments are entitled as well with specific forest attributions to promote PES projects. CXXIX However, the work of state and municipal agencies will be enhanced through coordination with SEMARNAT and CONAFOR, the most relevant agencies for carbon sequestration projects at the federal level. SEMARNAT has the attribution of defining methodologies, instruments and compensation mechanisms for carbon sequestration environmental services, CXXIII

while CONAFOR has the obligation to propose the value of environmental services and tocollaborate with SEMARNAT in the design and implementation of compensation mechanisms. CXXIII

The discrepancies between the legal and policy definitions of Mexico's most important projects related to REDD+ (PES and CDM schemes) have not greatly affected the classification of forests in Mexico. Instead, Mexico's current National Forest Inventory recognizes that inventories and hence forest classifications should be based upon existing robust scientific work. Data and typologies that had been previously produced should be incorporated into the Inventory to avoid the loss of important information that could serve to develop Mexico's forest policy. Section III of INEGI's Land Use and Vegetation Chart was chosen as the basis for the classification of forest and non-forest vegetation while fulfilling the requirements established by the General Law on Sustainable Forest Development and its regulatory decree. CXXIII

The classification of INEGI's *Land Use and Vegetation Chart* to a 1:250,000 scale includes more than 60 types of vegetation. Among them, forests can be generally grouped in ayarin forests (39,850.18 ha and 5,444 Gg of organic carbon in 2007), cedar forests (1,979.04 ha and 138 Gg of organic carbon in 2007), fir forests (144,144.27 ha and 22,486 Gg of organic carbon in 2007), pine forests (7,279,001.83 ha and 530,094 Gg of organic carbon in 2007), pine-oak forests (8,658,794.25 ha and 553,845 Gg of organic carbon in 2007), oak forests (11,099,328.55 ha and 563,907 Gg of organic carbon in 2007), oak-pine forests (4,216,130.73 ha and 207,311 Gg of organic carbon in 2007), cloud forests (1,702,639.36 ha and 210,498 Gg of organic carbon in 2007), gallery forests (19,428.43 ha and 951 Gg of organic carbon in 2007), cultivated forests (33,014.33 ha and 882 Gg of organic carbon in 2007) and induced forests (360 ha and 17 Gg of organic carbon in 2007). Coxxiv

Rainforests, on the other hand are classified according to their height and the persistence of their leaves throughout the driest time of the year. Lowland rainforests range between 4 m and 15 m high, midland rainforests range between 15 m and 30 m high and highland rainforests are higher than 30 m. According to the persistence of their leaves, in deciduous rainforests more than 75% of the species shed their leaves in the driest time of the year. In subdeciduous rainforests between 50% and 75% of the species shed leaves in the driest time of the year, while in subevergreen rainforests between 25% and 50% of the species do so. In evergreen rainforests more than 75% of the species maintain their leaves throughout the year.

Based on these definitions, INEGI classifies Mexican rainforests as highland evergreen rainforests (3,448,868.39 ha and 338,920 Gg of organic carbon in 2007), highland subevergreen rainforests (153,766.70 ha and 8,111 Gg of organic carbon in 2007), midland evergreen rainforests (550.13 ha and 37 Gg of organic carbon in 2007), midland subevergreen rainforests (5,325,448.32 ha and 570,131 Gg of organic carbon in 2007), lowland evergreen rainforests (39,794.14 and 3,247 Gg of organic carbon ha in 2007), midland subdecidious forests (4,162,057.69 ha and 338,061 Gg of organic carbon in 2007), lowland subdecidious forests (74,263.06 ha and 5,929 Gg of organic carbon in 2007), midland decidious forests (971,515.35 ha and 37,571 Gg of organic carbon in 2007), lowland decidious forests (14,166,077.70 ha and 689,517 Gg of organic carbon in 2007), lowland spiny forests (604,982 ha and 20,583 Gg of organic carbon in 2007) and gallery rainforests (1,962.61 ha and 145 Gg of organic carbon in 2007). These categories coincide with FRA's typologies under the general term of "forest" and that are reported to the Forest Division of FAO by Mexico. CXXXVII

The typology of the National Forest Inventory cxxviiiset the basis for the development of forest zoning according to Article 49 of the General Law on Sustainable Forest Development. Article 48 of the law establishes that forest zoning is a policy instrument according to which forest areas are identified, grouped and ordered according to their

biological, environmental, socioeconomic, recreational, protective and restorative functions within hydrological and forest basins, sub-basins and microbasins. Forest zoning thereby allows for a policy classification intended to promote sustainable forest management. CXXIIX

Article 13 of the regulatory decree of the General Law on Sustainable Forest Developmentestablishes that after a stakeholder engagement process, CONAFOR and SEMARNAT would proceed to develop forest zoning according to the National Forest Inventory, the imbalances that are present within the ecosystems because of natural phenomena and economic or social activities, and any other studies that have been performed by forest management units. CXXX

Specifically, Article 14 of the regulatory decree establishes that forest zoning will be based on three general categories. The first category comprises conservation areas or areas with limited or prohibited usage. These include natural protected areas and terrains with a forest vocation. The second category comprises restoration areas. These include forest terrains with high degradation and erosion, terrains that are currently experiencing forestation, reforestation or natural regeneration processes, areas at 3,000 m or more above sea-level, terrains with a slope greater than 45°, mangrove areas, cloud forests, gallery forests and highland evergreen rainforests, among others. The last zoning classification comprises production areas. These include:forest areas with high productivity, which have a canopy cover of more than 50% and a height of at least 16 m; forest areas with medium productivity, which have a canopy cover between 20% and 50% and a medianheight of 16 m; and forest areas with low productivity and a canopy cover of less than 20%. Arid areas with forest vegetation are included in this category. CXXXXI

## 4.4.2 Joint forest management

The policies on logging, using and benefiting from forests are ruled by Title Fourth of the General Law on Sustainable Forest Development. This title deals with the management and sustainable extraction of forest products including timber and non-timber products. The General Law on Sustainable Forest Development divides the activities related to the extraction and use of forest products according to the nature of the products (timber or non timber products) and the purpose of the activity (commercial forest plantations or collection for scientific or livelihood purposes).

#### **Extraction of timber products**

Articles 73 to 84 establish the rules related to sustainable extraction of timber. According to the General Law on Sustainable Forest Development, the extraction of timber requires previous authorization by SEMARNAT.To apply for authorization, it is necessary to prove ownership or possession of the plot through the respective deed. If the request comes from an *ejido*, it is necessary to submit the approval of the assembly to extract timber in the *ejido*. All applications need to be accompanied by a forest management programme. Forest management programmes need to include specific actions to induce the natural regeneration or reforestation of native species.

Article 76 establishes that environmental impact assessments (EIAs) are required in three specific cases: natural protected areas, rainforests with a land span greaterthan 20 haorif the extraction is of species of difficult regeneration. The wording of this article, however, is not clear. Instead of using the termaprovechamientosforestalesmaderablesas does the rest of the section, it uses the general term aprovechamientosforestaleswhich includes timber and non-timber products. Depending on the rules of

interpretation, this could give leeway to the requirement of EIAs for the extraction of non-timber products in these specific forest areas. It is also arguable whether the reasoning of Congress was to ask for EIAs only for these three areas and not to include EIAs as a general requirement alongside the forest management programme for the extraction of forest products in any forest or rainforest terrain. CONCRIV

SEMARNAT evaluates the applications as well as the feasibility of the programme with the support of theForest Counselof the State in which the plot is located. SEMARNAT can ask for modifications to the forest management programme to prevent ormitigate environmental impacts. It can also deny the application if the biodiversity or the regenerative capacity of the terrain is endangered or if the logging would take place in an "area of forest protection," which are forestlands adjacent to federal areas or strips of land that border private property. These lands are the source of streams, watercourses or water bodies. Conflicts related to land tenure are also source of denial for logging authorizations. CXXXXVI Authorizations are valid for one logging cycle and they can be renewed as necessary if it is been proven that the requirements of the programme have been fulfilled. CXXXXVII

## 4.4.3 Plantation management

According to Article 58 of the General Law on Sustainable Forest Development, commercial forest plantations are plots of land in which woody forest species are planted for commercial uses. Commercial forest plantations cannot be established as substitutes for native forest vegetation in forest terrains unless the applicants prove that the plantation would not endanger the biodiversity of the terrain. Commercial forest plantations can also be authorized if the applicants prove native vegetation has low commercial value or low biodiversity and that it is convenient to promote plantation of species from other habitats, and that the planted speciescan be adapted to the area and that they can benefit existing fauna and environmental goods and services. COXXXIX

### 4.4.4 Deforestation and degradation controls

Illegal deforestation and forest degradation continues in Mexico, including on reserves and in protected areas, for agriculture, timber and other reasons. <sup>cxl</sup>

Forest law violations are punishable in Mexico with administrative or criminal sanctions. Administrative sanctions affect the authorizations for the extraction of timber and non-timber products. They can include the suspension, annulment or revocoation of the authorizations that have been granted by SEMARNAT for the use and benefit of forest products. They can include the suspension, annulment or revocoation of the authorizations that have been granted by SEMARNAT for the use and benefit of forest products. They can include the suspension of the use and benefit of forest products. They can include the suspension of the use and benefit of forest products. They can include the suspension of the use and benefit of forest products. They can include the suspension of the use and benefit of forest products. They can include the suspension of the use and benefit of forest products. They can include the suspension of the use and benefit of forest products. They can include the suspension of the use and benefit of forest products. They can include the suspension of the use and benefit of the use and benefit of forest products. They can include the suspension of the use and benefit of forest products. They can include the suspension of the use and benefit of forest products are used to the use and benefit of the use and benefit of forest products are used to the use and use and use and use are used to the use are used to the use are used to the use and use are used to the use and use are used to the use are used to the use and use are used to the use are use

The annulment of authorization shall proceed whenever the object of the authorization is contrary to Mexican forest law or whenever it has been verified that the information used to grant the authorization was erroneous according to Article 67 of the General Law on Sustainable Forest Development. Authorizations shall be revoked whenever the SAGARPA has not authorized their transfer, whenever the conditions that have granted the authorizations are not being fulfilled, whenever harm has been produced to forest resources or forest ecosystems,

whenever their productive capacity has been compromised, or whenever sanitary, regenerative, restoration and conservation have not been implemented in the area, among others.

Unauthorized logging; unauthorized use of non-timber products; forest resources trafficking; unauthorized transportation, transformation and sale of forest products; illicit dismount or destruction of natural vegetation; and illicit change of forest zoning, with respect to rainforests and natural protected areas, are punishable with prison according to articles 417 to 419 of the Federal Criminal Code. Cxelii

To pursue its obligations, PROFEPA is currently enacting a series of programmes to ensure the conservation of forests. These comprise a Zero Logging Tolerance programme and special forest operations. PROFEPA has developed this programme in collaboration with CONAFOR, the Secretary of Social Development (SEDESOL), the National Commission of Indigenous Peoples (CDI), the Secretary of National Defense (SEDENA), the Secretary of Public Security (SSP), the Federal Police (PFP) and the National Center of Research and National Security (CISEN). The Zero Logging Tolerance programme includes a series of actions around forest operations: inspection of vehicles, sawmills, storage facilities and processing centers; insurance of wood and carbon; surveillance tours in forest lands; review of land use changes; and the establishment of environmental social watch committees formed by the members of forest communities.

Environmental watchdog committees (CVAP) have been promoted by PROFEPA to engage local communities in the protection of forest areas and the sustainable use of forest resources. They have been created within the *ejidos* whose Assembly has authorized the naming of individuals within the *ejido* who are willing to participate in the Committee. The decisions of the CVAP are subject to the decisions of the Assembly of the *ejidos*. PROFEPA provides capacity building to the members of the CVAPs to organize and coordinate the actions of the owners and possessors of forest resources and to help PROFEPA pursue the enforcement of forest law through early detection of illicit activities. The creation of CVAPs also plays an important role in forest governance and potential REDD+governance because it catalyzes environmental stakeholder participation, provides clarity in forest management and enforcement, and allows for a real appropriation of forest projects developed within the *ejidos*. By June 2011, at least 219 CVAPs had already been created, of which the performance was evaluated by PROFEPA. Continuation of the content 
Special Forest Operationshave been implemented to resolve critical problemsthat require special attention and which have been identified as such because of specific complaints, because of environmental contingencies caused by natural disasters, because of land tenure conflicts that lead to illegal logging or because of the existence of specific illegallogging activities related to well determined groups in critical forest areas. cxlv

## 4.4.5 Mexico's national forest policies

The General Law on Sustainable Forest Development and the Law on Sustainable Rural Development specify the means by which policies on payment for ecosystem services shall be developed in Mexico. Both laws define "environmental services." However, the General Law on Sustainable Forest Development is the only one that specifically includes carbon sequestration as an environmental service. While the Law on Sustainable Rural Development does not include carbon sequestration as an environmental service, it does not exclude it either. Carlot A revision of the definition of ecosystem services in both laws could be considered as an alternative for the

development of a REDD+ legal framework. It is also worth considering defining the legal concepts of "carbon" and "carbon sequestration"; neither isdefined in either law. cxlvii

The General Law on Sustainable Forest Development establishes that national forest policy is a priority area for the development of the country. That is why the forest sector in Mexico follows the Strategic Program for the Sector for 2025. Calviii The General Law on Sustainable Forest Development establishes as well that national forest policies shall promote and encourage sustainable forest practices to enhance the income and livelihoods of the people that depend on the forest sector. Therefore, the preservation of environmental services through economic incentives is recognized by the law as a guiding principle of the national forest policy that requires an effective participation of forest stakeholders among which the proprietors of forest land play a significant role. Calix

One of the objectives of the General Law on Sustainable Forest Development is the development of environmental services policies for forests. To pursue this objective, the law establishes that the implementation of activities aimed at the conservation, protection and generation of environmental services are of public utility. <sup>cl</sup>This allows the possibility to expropriate land for carbon sequestration purposes. This is a matter to be taken into consideration for the elaboration of REDD+ Activities, Guidance and Safeguards in Mexico so as to establish mechanisms that would respect land tenure rights of indigenous and rural communities who could be affected by the implementation of such policies.

In 2003 CONAFOR initiated a payment for ecosystem services (PES) scheme at the Federal level through its Environmental Hydrological Services Programme. cli This initiative was further developed in 2004 through the development of CONAFOR's programme for carbon sequestration and biodiversity services (PSA-CABSA). This programme was developed to provide alternatives for agricultural communities and forestry systems. Both programmes were joined under CONAFOR's 2006 Environmental Services Program (PSA), which later became part of the current *ProÁrbol* initiative. At the federal level, this is Mexico's most important PES programme, whose accomplishments have made it be seen as a model to follow in Latin America. It has been credited with significantly reducing the rate of deforestation in signed forests, equal to 3.2 million tonnes of avoided CO<sub>2</sub> emissions. Cliii

The most relevant cases of successful carbon sequestration projects under Mexico's PES scheme are those that have been developed among indigenous communities in Oaxaca and in the Sierra Gorda of Queretaro. The "Carbon sequestration among indigenous and farming communities in Oaxaca"isthe oldest carbon sequestration PES project of CONAFOR and has demonstrated the successful implementation of a carbon sequestration scheme among indigenous communities. It began in 2004 with funding by CONAFOR under PSA-CABSA. Its target was ten indigenous communities in the southern and northern mountainous regions of Chiapas that belong to the Mixe, Chinantec and Zapotec indigenous communities. The project aimed to halt or prevent the deterioration of their lands because of their agricultural practices by presenting them with an alternative means to generate income through the conservation of the forests. The most important obstacle was to convey the message that reforestation could provide income for communities who had a strong agricultural tradition. NGOs such as ServiciosAmbientales de Oaxaca, A.C. and Pronatura México, A.C. as well as community work for the conservation of forests (tequio) had an important role for the success of the project through their involvement with the community. The successful conservation of the forests allowed communities to sell carbon credits four years after the programmebegan its implementation, and by 2009, the sale of carbon credits had already generated \$394,000 USD.

The carbon sequestration PES scheme of the biosphere reserve of Sierra Gorda in Queretaro is more recent under CONAFOR's PSA. In 2009 CONAFOR, alongside civil organizations, granted funds to implement actions that would restore forests and their water capture capacity in Sierra Gorda. The project also targeted carbon sequestration through forest conservation. The program designed two types of protocol for the generation of credits according to whether they accounted for reforestation or forest regeneration.

The lessons taught by Oaxaca's and Queretaro's experience have allowed CONAFOR to build a repertoire of past experiences for the development of its pilot REDD+ projects and of its national REDD+ strategy. The projects participants of indigenous communities in Oaxaca and Sierra Gorda are even considering expanding their plans to include REDD+ schemes. However, it must be taken into consideration that despite their projects' success incarbon sequestration, REDD+ implies a broader development scheme that needs to ensure governance and the institutionalization of the initiative to enhance the livelihoods of its beneficiaries. clvi

In particular, if REDD+ schemes are to be developed among indigenous communities, the Mexican government may find it useful to refer back to Article 2 of the National Constitution according to which the Federal, State and municipal governments have the obligation to reduce and abate the inequalities of indigenous communities through the promotion of their regional development, local economies, gender equality and the sustainable development of its inhabitants. clvii

#### 4.5 Environment

Mexico's environmental and natural resources management policies and institutions developed over time along a sectoral approach without intra- and inter-sectoral institutional arrangements for coordination. At various periods, there have been over a dozen government ministries involved in environmental affairs and more than 20 Acts of Parliament affecting the environment without a single overarching institutional arrangement, institution or policy mandated for integration and collaboration over environmental issues.

Of relevance to REDD+, Mexico's environmental law requires consultation with "the Agency in the preparation of any plan relating to forestry, fisheries, wildlife, water or any other nature resource." At State or Federal Levels, Ministers may also declare any environmentally sensitive or fragile area, such as wetlands, to be an environmentally protected area, for which the management is vested in the environmental authority itself. Furthermore, any project that may have an effect on the environment, adverse or otherwise, cannot be undertaken without the environmental authority's prior written approval, which is often conditioned on recommendations based on an EIA. It is likely that REDD+ projects will be required to undergo EIA procedures and seek approval from the environmental authoritiesat the planning stage. EIAs could be used to ensure that certain REDD+ Activities, Guidance and Safeguardsprinciples be applied underMexico's environmental laws, including: equitable access to environmental resources; functional integrity of ecosystems; involvement of the public in the development of policies, plans and programmes; access to information; community participation in natural resources management; and the sharing of benefits arising from the use of resources.

Three additional provisions of Mexico's environmental laws are worth mentioning for their impact on REDD+, namely the creation of the Environmental Fund, Central Environmental Information System and Public Participation mechanisms. The Environmental Fund consists of moneys allocated by Parliament, fines or donations from developers conducting activities with adverse effects, and grants from any source. This can be used for various environmental protection and restoration projects, including REDD+ projects. The Environmental Information System can co-ordinate the management of environmental information within sector ministries and

establish guidance for gathering, processing and disseminating environmental information, including all policies, regulations, reports, strategic environmental assessments and other information relating to the environment.

The General Law on Ecological Equilibrium and Environmental Protection provides for public participation and access to environmental information in Title Five. It requires the Federal government to promote public participation in the planning, execution, evaluation and monitoring of environmental policies and natural resources. Chill This includes convening, within the National System for Democratic Planning: unions; businesses; farmers; agricultural, fisheries and forestry producers; agrarian communities; indigenous communities; educational institutions; social organisations; NGOs; and other interested persons, to put forward their opinion and proposals. Child The right to access environmental information is put into place through the institution of a National System for Environmental Information and on Natural Resources which is available for public consultation. The law also provides for a right of public denunciation, where any person, social group, NGO, associationor societies can denounce to the Federal Prosecutor for Environmental Protection or any other authoritie, any act or omission which produces or can produce ecological disequilibrium or damage to the environment or natural resources, or which contravenes the dispositions of the Law or other regulations that regulate matters related to the protection of the environment, or which hinders the preservation and restoration of ecological equilibrium. These rights of public participation and access to information will influence REDD+ through broad public participation and transparent scrutiny of proposals.

Lastly, the Amparo Law provides for a judicial remedy to laws or actions of the State which violate the individual rights guaranteed in the Constitution, federal laws or actions that infringe or restrain the sovereignty of Mexican States, or State laws that invade the sphere of federal jurisdiction. The remedy may only be sought on behalf of the person prejudiced by the law, treaty, regulation or whatever other act which is challenged. It may be pursued by the individual, their representative, or through a relative or third party in cases where the law expressly permits it, and it may only be obtained for the aggrieved party by their legal representative. This could prove to be a hurdle to REDD+ project development if government laws or acts violate individual rights or cross jurisdictional bounds and an aggrieved party decides to pursue judicial action.

# 4.6 Energy and Electricity

As mandated by the Constitution, the electricity sector is federally owned and operated. Under the Law of the Public Service for Electric Energy, clave the Federal Electricity Commission (CFE) is the institution responsible for implementing Article 27's requirements relating to the provision of electricity. Article 27 states that only the Nation may generate, transmit, transform, distribute and supply electric power with the purpose of providing service to the public. Concessions may not be granted for this purpose and the Nation shall obtain the goods and natural resources necessary for these ends. Similarly, the use of nuclear fuels for nuclear power generation and their applications in other uses is reserved for the Nation. Clave Ultimately, participation in the energy sector must be through the Federal government and its approvals, which limits the breadth of participants that will be interested in establishing energy generation works in or near forested areas which would be suitable for REDD+.

In 2008, the Renewable Energy Development and Financing for Energy Transition Law chivilentered into force. Its object is to regulate the use of sources of renewable energies and clean technologies to generate electricity as distinct from the provision of electricity as a public service, as well as establishing a national strategy and the instruments needed to finance the energy transition. Hydropower sources with a capacity greater than 30 megawatts are excluded from the scope of the law. chivilit requires the Secretary of Energy (SENER) to develop a national strategy for energy transition and sustainable energy use, as well as a special programme for renewable

energy. SEMARNAT is also involved in the sector because it is responsible for environmental policy and the preservation of renewable and non-renewable resources. It may have some impact on REDD+ projects because it proposes competing land uses, such as wind, solar, geothermal and small-scale hydroelectric power generation, the development of which is viewed as being in the public interest. claim

TheLaw to Promote and Develop Biofuels clxx is also relevant to REDD+ as forest biomass is included within its purview. Those subject to the law include *ejidos*, communities and producers of natural products from which can be obtained biomass, and in general all natural or legal persons who in an individual or collective manner undertake any activity related to the production, commercialisation and/or distribution, transport and storage of biofuels. With the establishment of the Intersecretarial Commission for the Development of Biofuels, forests which might otherwise be suitable for REDD+ projects may be deemed useful for the development of wood-based biofuels, which would remove biomass that could otherwise be sequestered. Whether the development of forest biofuels and REDD+ can co-exist is a question which remains to be answered.

#### 4.7 Trade, Investment and Finance

#### 4.7.1 Trade and investment rules

As with other types of trade and investments, climate finance for a future REDD+ mechanismcan be facilitated by fiscal incentives and accessible business developmentprocedures to attract investors. Trade rules and incentives form an important component of regulatory measures to promote REDD+ activities from direct project funding to facilitate alternative and efficient energy. Clock

With respect to guarantees for investors against the risks of reversals, Mexico is a signatory to several international risk insurance facilities to protect investors from war, strife, disasters, political actions, land expropriation and other disturbances. These include the Multilateral Investment Guarantee Agency (MIGA) of the World Bank, Chapter 11 of the North American Free Trade Agreement, and other bilateral investment protocols with a number of countries. These agreements may not provide automatic coverage for REDD+ investors seeking indemnity for possible reversals as they must apply prior to being insured. However, depending on the facility, Mexico's and other countries' capital contributions to the insurance pool may lower the costs to investors.

#### 4.7.2 Financial transparency and accountability

Financial considerations that would be worthy to be included in a REDD+ legal framework includethe determination of who would receive payment for maintaining forest resources, the establishment of who would be the crediting body in charge of allocating carbon credits from REDD+ forest conservation and the determination of who would be eligible toreceive credits.

One of the most important elements to consider for clarity regarding who receives payment for maintaining forest resources is the establishment of a clear definition of whether the ownership of the land also implies ownership of the carbon found within the land. It would also be recommended to establish clarity as to whether carbon rights can be transferred to third parties and as to whether the lease of the land for any other activities would grant authorization for the enjoyment of payment for carbon credits. In other words, it would be beneficial to specify whether the owners of forest land need to be participants of REDD+ projects, whether they need to grant their authorization of such activities in their lands in case of lease or whether REDD+ activities can proceed without their involvement once the terrain has been leased to a third party.

The determination and segregation of rights for payment for different ecosystem services would also be possible through a clear identification of the owner of the land and the owner of the carbon or any other type of environmental credit according to the conservation activity. Another issue worth considering would be whether the possessors of land would be entitled to ownership of the carbon found in the land or whether special regulations would apply to possessors who cannot gain proprietor status of forest parcels according to the current Agrarian Law. A review of the General Law on Sustainable Forest Development, the General Law of Ecological Equilibrium and Environmental Protection, the Agrarian Law andthe Federal Civil Code, the Civil Codes of the States and the General Law of National Assets would be recommended for that matter.

As for the determination of who is eligible to invest in REDD+ activities and acquire carbon credits, it is not clear, from a review of the requirements in national investment law regarding foreign investment, whether there would be any restrictions to foreign participation or whether the schemes that are currently applied to CDMs would be applied to REDD+ projects. A review of the rules of theNational Agrarian Registrymay reveal annotations in the deeds of the development of any carbon sequestration activity in forest lands. This can grant proof in case of future conflicts related to the payment for maintaining forest resources and guarantee greater certainty regarding existing rights and interestsboth in the forests and their environmental services and benefits.

A revision of the General Law on Sustainable Forest Development and its definitions of "aprovechamientosforestales" and "payment for ecosystem services" would also be a matter to take into consideration, not only to determine who receives payment but also to establish eligibility for hosting carbon markets. It may be necessary to evaluate whether the use of forest lands for carbon sequestration would fall under the general definition of aprovechamientoforestaland to establish whether the rules of timber or non-timber use would apply, whether it would fall under the rules of forest conservation or whether it would fall under the rules of payment for ecosystem services found in the same law and its derivative programmes. Current payment for carbon sequestration programmes have operated under the latter option but this does not ensure that they could not fall under either of the two former alternatives, given the current definition of the terms.

The determination of the crediting body is directly linked to the potential General Climate Law. It would be worth considering whether the creation of a national crediting body should follow current CDM projects' approach or whether national crediting institutions such as the National Banking and Stock Exchange Commissionshould be involved in such a task either by qualifying crediting agencies or adopting the task itself.

The current development of state climate laws, and its consideration of establishing financial mechanisms for carbon markets, creates the need to consider whether a REDD+ legal framework should establish coherence between different carbon credit markets that could arise through the development of REDD+ and non-REDD+ mitigation activities. An alternative tothe regulation of such markets would be to follow international standards and it would be recommended to establish a balance that would ensure the creation of credits without the burden of unnecessary bureaucratic processes that would produce disincentives toprivate investment.

Another matter to take into consideration is whether the payments received for forest conservation would be deductible fromincome taxes or whether they would have any special treatment under Federal tax law. Current carbon sequestration projects have received money from the Federal Government for their initial development, but once aprogramme has been established and has been producing carbon credits that allow for sustained income, it is necessary to analyze the tax situation of the beneficiaries as well as of the recipientsof carbon credits. This would imply a revision of the Fiscal Code and the Federal Law of Income Tax. Given the annual review of the

latter law, it would also be recommended to consider the development of sustained tax incentives to potential buyers of carbon credits and the current tax scheme of non-afforestation and non-reforestation CDM projects currently in existence in the country.

Furthermore, the transparency and accountability of financial investments directed toward REDD+ has a bearing on attracting investors and equitable revenue sharing for results-based activities. All countries habitually grapple with the misappropriation of funds in public office. The Office of the Auditor General has constitutional jurisdiction to verifythat moneys expended have been applied to their proper purpose and to audit the accounts of every statutory corporation, department in which funds and accounts are established and private institution that receives grants. In addition, the Mexican institutions for Anti-Corruption have mandates to investigate a range of corrupt government financial practices, with relevant enabling provisions in the Criminal Code.

#### 4.7.3 Access to international financial mechanisms

Mexico also has access to external trust funds managed by the World Bank such as the Global Environmental Facility and certain carbon finance mechanisms, as well as considerable voluntary finance through large environmental and conservation organizations.

The Global Environment Facility (GEF) provides grants to developing countries and countries with economies in transition, for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer and persistent organic pollutants, and it is the largest funder of projects to improve the global environment. The GEF partnership includes 10 agencies, some of which are relevant to REDD+ financing in Mexico, namely: the UN Development Programme (UNDP), the UN Environment Programme (UNEP), the World Bank, the UN Food and Agriculture Organization (FAO)and the Inter-American Development Bank (IADB). The GEF is also the financial mechanism for the UNFCCC. Cloxii One of GEF's trust funds, the Special Climate Change Trust Fund (SCCF), is a particularly relevant to REDD+. It is a voluntary trust fund that finances activities, programmes, and measures relating to climate change complementary to those funded by the main GEF trust fund and those provided by bilateral and multilateral funding. Cloxiii

Mexico is participating in the Partnership for Market Readiness (PMR), a grant-based, capacity building trust fund that provides funding and technical assistance for the collective innovation and piloting of market-based instruments for GHG emissions reduction. The Partnership exists in order to provide a platform for technical discussions on market instruments, foster South-South exchange, facilitate collective innovation for pilot efforts and harness financial flows for implementation and scale up. Market preparation is also a crucial part of the work of the PMR. The PMR can help in REDD+ development as it focuses on opportunities to design and develop market instruments, developing the necessary in-country capacity to implement these instruments, and creating opportunities to pilot new instruments.

Mexico also has access to the Forest Carbon Partnership Facility (FCPF), which became operational in June 2008 and is a global partnership focused on REDD+. The FCPF assists tropical and subtropical forest countries develop systems and policies for REDD+, and provides performance-based payments for emission reductions. It is meant to complements UNFCCC negotiations by demonstrating how REDD+ can be applied at the country level. Thus far, the programme in Mexico is still in the preparedness phase, for which the World Bank has allocated USD \$3.6M<sup>clxxv</sup>

Voluntary carbon market projects are another potential source of REDD+ financing for project development. These include market transactions based on the Verified Carbon Standard (VCS), Climate, Community and Biodiversity

(CCB), as well as the Gold Standard. In 2010, land-based projects supplied the largest volume of credits (28 MtCO<sub>2</sub>e) transacted in the over-the-counter (OTC) market, whereREDD+ projects alone generated 29% of credits transacted in the voluntary market. Clearly, great potential exists for REDD+ project developers to work with voluntary purchasers of carbon offsets during the creation of an international legal framework for REDD+.

### 5 Key Challenges to Legal Preparedness for REDD+ in Mexico

#### 5.1 Overview

This section draws on the above review of existing laws and institutions and employs the reference tool at **Annex 1** to identify the key challenges to legal preparedness for REDD+ in Mexico. This section does not provide a comprehensive assessment of the detailed provisions of all laws in Mexico for the purposes of legislative reform. Mexico has designated one component of its UN-REDD Work Programme to strengthening the national governance framework for the implementation of REDD+, including the reform of related institutional, legal and financial mechanisms. In the interim, this Country Study focuses uniquely on predominant gaps and barriers that may be assessed at a later date, namely: (s.5.2) Interrelationship between State and Federal laws and policies; (s.5.3) Clarity and coherence of laws and institutions related to REDD+; (s.5.4) Regulation of land use change for effective REDD+ implementation; (s.5.5) Benefit distribution systems that are equitable and results-based; and (s.5.6) Other key challenges. Each of those sections correlates to a combination of REDD+ Activities, Guidance and Safeguards. In light of the review of Mexico's laws and institutions, the key challenge isto address each of these challenges in a manner that is equitable and secure. This is detailed further below, as Mexico can offer useful regulatory lessons learned in this respect.

#### 5.2 Promoting Complementary State and Federal Law and Policy Frameworks

The Cancun Agreements call for national forest reference emission levels and/or national forest reference levels which can be constituted as a combination of subnational levels (i.e., the "nested" approach) or, as an interim measure, subnational levels. Moreover, they require national level MRV, information systems as well as reporting on how the displacement of emissions is addressed between national and subnational levels. The issue also relates to the distribution of benefits from the international community.

Mexico has developed one of the most important cases of national and subnational response. The Federation and the States have achieved important agreements related to forest and climate joint response. This follows from INE's promotion of the climate action plans within each state and from CONAFOR's overarching and collaborative role with State agencies to develop forestry and REDD+ related projects.

Despite this collaboration, one of the most important challenges will be to coordinate subnational laws with a potential general climate law that distributes competences. Some federal officers consider that the states should wait for the enactment of a general climate law that would distribute competences among the Federation, the States and the municipalities. However, the residual clause of Article 124 of the National Constitution, alongsidearticles 73.XXIX-Gand 27 of same, and the competences found in Chapters II of the General Law of Sustainable Forest Development and the General Law of Ecological Equilibrium and Environmental Protection, grant the States jurisdiction to approve and enact climate laws despite any delay ina Federal legal response. The existence of climate laws such as the ones in Veracruz, Chiapas and Mexico City needs to be taken

seriously for the development of the general law. At the same time, a review of such laws needs to be taken into consideration once a general law is passed by the National Congress to establish coherence among States and the Federation in terms of climate and REDD+ regulation.

Figure 10: Challenges to the Interrelationship between State and Federal Laws and Policies for REDD+

- Coordination of federal and state level climate and REDD+ policy responses
- Coordination of subnational laws with a potential general climate or REDD+ law
- Revision of current subnational climate laws to reach legal coherence among the Federation, the States and the municipalities

#### 5.3 Securing Clean and Coherent Law and Institutional Mandates for REDD+

#### 5.3.1 Ensuring REDD+ Activities, Guidance and Safeguards through clarity and coherence

The clarity and coherence of policies, legislation, regulations and institutional mandates, related to REDD+, are crucial to overcome inhibitive ambiguities and conflicts among REDD+ planning and implementation actors. This aspectof legal preparedness for REDD+ derives from a number of requirements under the Cancun Agreements and REDD+ Activities, Guidance and Safeguards, as indicated at **Figure 10**. In particular, clarity and coherence contribute to the cross-sectoral coordination across ministries, departments and agencies that is necessary to address the drivers of deforestation and forest degradation in a manner that does not deprive forest dependent communities of human needs, such as food and energy. Gaps and conflicts in institutional mandates can result in the absence of action, duplication of efforts or cancelling out of positive initiatives where actors work at crosspurposes. Additionally, clarity and coherence of laws and institutions address hierarchies in land and natural resource interests, such as mining, easements and acquisitions for undertakings, which can quickly undermine ongoing REDD+ forest management activities. Such occurrences could have a detrimental effect not only on the permanence of mitigation effects but also on the possibility of results-based payments destined to enhance social benefits for communities.

Consequently, it is vital that legal and institutional frameworks have a high degree of cross-sectoral and multijurisdictional coordination from the national to the local level. Supportive legal instrument options include the repeal of laws and regulations that create perverse subsidies; enactment of fiscal incentives that assist in relieving human pressure on forests; consistent definitions of key terms relating to forests, land use and carbon markets; establishment of inter-sectoral committees and working groups; and rules defining and supporting carbon ownership and use.

Figure 11: Legal and Institutional Clarity and Coherence and the REDD+ Activities, Guidance and Safeguards

- Ensure that REDD+ activities are used to enhance other social benefits
- Address the drivers of deforestation and forest degradation
- Promote and support transparent and effective national forest governance structures, taking into account national legislation
- Promote and support actions to address the risk of reversals
- Promote and support multiple forest functions

- Undertake activities consistent with national sustainable development needs and goals, including reducing poverty while responding to climate change
- Undertake activities that are results-based
- Promote and support that actions complement or are consistent with national forest programmes
- Promote and support actions to reduce displacements of emissions

#### 5.3.2 Key challenges to clarifying legal and institutional frameworks for REDD+ in Mexico

Mexico is facing a number of challenges related to clarity and coherence among its laws, policies and institutions for the development of REDD+ in Mexico. These are related to clear definitions of key terms for REDD+ implementation, clear classifications of potential forests for REDD+, clarity and coherence in contracting issues related to carbon markets, and coherence with current indigenous legal framework among others.

If the General Climate Law or a REDD+ law were to include a definition of "forest," it is recommended to establish coherence with the legal definitions used in the regulatory decree of the General Law on Sustainable Forest Development and the sustainable forest development laws of each statesand the policy definitions of PES and CDM schemes. The definition of specific REDD+ terms such as "carbon," "carbon sequestration," "payment for carbon sequestration services," "permanence" and "crediting" would need to be incorporated in the legal system in a coherent manner with current PES and CDM schemes. To avoid conflicts among different levels of government, it is recommended that definitions at the Federal and State levels coincide.

A clear definition of "forest" is recommended to establish the eligibility of land for REDD+ projects. At the same time, it is recommended as well to clarify the types of forests that are eligible for the development of REDD+ activities. The classifications of INEGI and the National Forest Inventory need to be clear and transparent enough to establish what forests are eligible in the law, in the regulatory decree of a REDD+ law or in the rules of operation of national REDD+ programmes. The rules of Mexico's Payment for Ecosystem Services programme can work as a model to follow through its qualification methods to grant payments according to the type of forests in which the proposed project is to be developed.

The establishment of whether the rules of *aprovechamientoforestal*, the rules of forest conservation or the rules for payment for ecosystem services apply to the development of REDD+ activities under the General Law of Sustainable Forest Development would allow the determination of the types of authorizations that would be needed for the development of REDD+. In current practice, any activity that is developed under an *aprovechamientoforestal*scheme in Mexico does not qualify for the PES scheme for carbon sequestration evenfor non-timber activities. However, the definition of the term would allow for some leeway unless the legal nature of the term "carbon sequestration" is defined in the law.

At the same time, if the government decided that specific requirements were to apply to granting concessions for the development of REDD+, it is recommended that they beestablished with clarity in the law or in its operative programme.

In light of existing proposals to amend the national Agrarian Law, it is worth considering an amendment of its current scheme of land classification (for agricultural, livestock or forestry purposes) to include as well areas of conservation in coherence with the General Law of Ecological Equilibrium and Environmental Protection.

Based on Article 27 of the Constitution and on the General Law on Sustainable Forest Development, it would be expected that the development of any REDD+ project would require Federal authorization. Issues to be considered for such authorizations could include a determination of specific project baselines regarding the conservation of forests and carbon capture, the criteria that would need to be followed for the project's approval, and the types of plans and reports that would berequired toconsider granting an authorization and to review its implementation. It is worth considering a requirementfor forest management programmes, as does the General Law on Sustainable Forest Development. Environmental impact assessments are also potential specific requirements for granting authorizations.

It would be advisable to evaluate whether the establishment of such specific requirements would best beincluded in alaw (e.g., the potential General Climate Law, a General REDD+ Law or in the General Law on Sustainable Forest Development)or whether a general provision for authorization should be found in the law and specific requirements should be contained in a regulatory decree or the operation programmes of REDD+ projects.

It would be advisable to determine the duration of REDD+ authorizations in accordance with current Land Law to avoid any potential conflicts. In the case of the *ejidos*, they cannot be for a period longer than 30 years as required by the Agrarian Law.

The relationship that exists between the Federation and the States and municipalities regarding the conservation of forests via the General Law on Sustainable Forest Development and the Sustainable Forest Development laws of the Statesmakes an evaluation of their coherence worthy of consideration.

At the same time, it would be recommended that either a General REDD+ Law,or a REDD+ chapter in the potential General Climate Law or in the current General Law on Sustainable Forest Development, specify the relationship between subnational REDD+ activities and national baseline crediting for REDD+ carbon credits. This would include considering whether there would be a specific credit allocation process at the national or subnational level for specific projects, and also whether there would be consequences for under-performance at the subnational level. A review of current State laws and regional agreements with a REDD+ component would be needed to achieve coherence among the Federation and the subnational regimes.

All of the above would be reinforced by the establishment of specific safeguards targeting indigenous and vulnerable rural communities inhabiting potential REDD+ lands. Acting in accordance with indigenous rights as recognized by international treaties, declarations and the federal Constitution would imply strengthening the General Law on Sustainable Forest Development to include consultation processes regarding REDD+ activities prior to their development as a policy alternative. At the same time, it would be important to guarantee the lack of duress in the contracts of indigenous peoples related to REDD+, to avoid situations such as the ones presented in the Inter-AmericanCourtof Human Rights earlier this year. This would imply specific activities such as ensuring that the indigenous communities are aware of and fully understand the provisions of the contract and that they have accepted its terms. The experience of carbon sequestration projects in indigenous communities in Oaxaca could serve as a good model.

#### 5.3.3 Summary conclusions on securing clear and coherent legal frameworks for REDD+

The establishment of clear and coherent laws and institutions for REDD+ poses a new challenge to Mexico's current governance framework. Historically, Mexico's federal and State level ministries, departments and agencies

have largely operated in isolation. Recent legal reforms that attempt to resolve this isolation have extended broad jurisdiction to multiple institutions on potentially overlapping areas of forested lands. Mexico continues to face key challenges to establish a legal foundation for clear and coherent governance of REDD+ activities, which can be summarized as follows:

Figure 12: Challenges to Clear and Coherent Laws and Institutions for REDD+

- Clarity and coherence in the legal definition and legal nature of forest, carbon, carbon sequestration, payment for carbon sequestration services, permanence and crediting among others
- Clarity in eligibility of land for REDD+ projects
- Coherence of rules of operation for REDD+ projects in private and public land
- Inclusion of conservation services as productive services within the Agrarian Law to classify plots of land
- Consideration of environmental impact assessments
- Coherence among federal and state level laws and policies related to REDD+
- Coherence of REDD+ Activities, Guidance and Safeguards with indigenous rights

#### 5.4 Regulating Land Use for Safe and Effective REDD+ Implementation

# 5.4.1 Ensuring respect for REDD+ Activities, Guidance and Safeguardsin the regulation of land use

The primary driver (82%) of deforestation and forest degradation in Mexico results from conversion to pasture land and slash and burn agriculture. The Cancun Agreements request that countries address the drivers of deforestation and forest degradation, while also ensuring social and environmental benefits and the adherence to human rights, poverty reduction and development goals, as indicated at **Figure 12**. However, addressing certain drivers may be more challenging than others, for instance where they not only relate to the subsistence of local communities but also to the overall economy, whether formal or informal. In such instances, REDD+ forest management or even command and control legislation that prohibits activities through bans or licensing and enforcement, may not provide an adequate substitute to address the drivers. Instead, the right policy mix must be found, whichshouldrelieve the human pressure on forests but not compromise livelihoods. Mexico's challenges with the conversion of forest to pasture land and slash and burn agriculture may be one such instance.

Figure 13: Regulation of Pasture Conversion and Slash and Burn Agricultureand the REDD+ Activities, Guidance and Safeguards

- Address the drivers of deforestation and forest degradation
- Undertake activities that are results-based
- Ensure that REDD+ activities are used to enhance other social benefits
- Promote and support transparent and effect national forest governance structures
- Promote and support of multiple forest functions
- Undertake activities consistent with national sustainable development needs and goals, including reducing poverty while responding to climate change

#### 5.4.2 Key challenges to regulating land usefor effective REDD+ implementation

While community-based REDD+ projects may offset conversion to pasture land and slash and burn agriculture by creating alternative livelihoods, the supply chain repercussions create a complex of challenges in regulating these types of land use a manner consistent with the social aspects of the REDD+ Activities, Guidance and Safeguards.

To achieve coherence between the expansion of the agriculture frontier and forest conservation policies, the federal agriculture and environmental Secretaries (SAGARPA and SEMARNAT) have agreed on a series of land use commitments to enhance opportunities to sell carbon credits. This is an important institutional response to one of the key challenges to regulating land use for effective REDD+ implementation. However, unless the communities see tangible benefits from this allegiance, slash and burn will continue to be one of the most important drivers of deforestation and forest degradation. Overlapping institutional jurisdictions for conversion to pasture land, slash and burn agriculture, and forest conservation, need to be addressed by the Secretaries of State governments to facilitate subnationalland use planning.

The constitutional attribution of municipalities and *ejidos* in terms of land use planning is also considered to be a key challenge toa REDD+ framework. Municipalities and *ejidos* are entitled to make decisions with respect totheir own territory, and this attribution could act as an obstacle in the development of REDD+ schemes unless the communities have appropriated them as a means to enhance their livelihood.

At the same time, Mexico faces jurisdictional issues that relate not to opposing institutional attributions, but rather to areas in which neither the federal, state nor municipal governments have jurisdiction. One of the most important challenges within the state of Chiapas is indigenous governance, giventhe lack of jurisdiction of the national and subnational authorities. The recognition of self-determination of certain indigenous communities (caracoles) in Chiapas following the 1994 Zapatista movement and the 1996 San Andres Accords includes a jurisdictional challenge that needs to be taken into consideration for the development of REDD+ in the state. Within the caracoles, the Zapatista movement coordinates the community. Therefore, any development of a REDD+ initiative within those regions needs to go through their acceptance in such a way that it is not seen as an imposition of the government that opposes their own way of living. Dialogue and negotiation through NGOs play a key role indealing with this challenge.

Another important challenge with respect to indigenous communities is the acceptance of climate change within their own cosmogony. Indigenous peoples in Chiapas do not believe in climate change because their existence is based on the forest. If the forest in their immediate vicinity is still there, there is no source of worry. Creating awareness within their own language, traditions and religion is one of the most important challenges for a REDD+ governance framework.

#### 5.4.3 Summary conclusions on the regulation of land use for REDD+ in Mexico

Conversion to pasture land and slash and burn agriculture are the principal drivers of deforestation and forest degradation and poses significant challenges to effective REDD+ implementation in Mexico. Figure 14 illustrates some of these key challenges. Not only does conversion to pasture land and slash and burn agriculture provide livelihoods for the local communities that may undertake REDD+ activities, but it is also a source of income for hundreds of thousands of people in the informal economy. Consequently, if Mexico is to address this driver in a manner that is consistent with the REDD+ Activities, Guidance and Safeguards, it will have to provide an adequate substitute to maintain the social benefits that should flow from REDD+ and continue to pursue its goals of poverty alleviation and sustainable development. There are already several government departments or agencies that are mandated to address conversion to pasture land and slash and burn agriculture, including through many programs. However, rather than utilize the jurisdictional overlap to collaborate on creating the right policy mix, shared mandates have resulted in gaps and inactivity.

Figure 14: Key Challenges in Land Use in Mexico

- Overlapping institutional jurisdictions among environmental and agriculture Secretaries at the federal and state level
- Recognition of independent land use jurisdictions at the federal, state and municipal level, as well as among ejidos and caracoles
- Translation of the existence of climate change into the language, traditions and cosmology of indigenous communities for adequate land use

#### 5.5 Formalizing Benefit Distribution Systems that are Equitable and Results-based

#### 5.5.1 Formalizing Benefit Distribution Systems that deliver results and respect Safeguards

Equitable and results-based BDS areunderstood to flow from the Cancun Agreements as a necessary precursor toseveralSafeguards, as indicated below at **Figure 15.** In particular, BDS enhance the social benefits of REDD+ activities for communities directly involved in paragraph 70forest management for poverty reduction and sustainable development. They also provide the foundation for effective implementation and permanence by incentivizing activities that sequester carbon and/or limit or reduceGHG emissions through results-based payments. Specific legal instrument options that may support equitable and results-based BDS include, *inter alia*, rules that determine entitlement to benefits among government, landowners, local and indigenous communities and persons engaged in forest management; participatory decision-making procedures to decidethe appropriate level, nature and timing of benefits, including *ex-ante* start-up costs; accessible and enforceable disputes resolution mechanisms that respect customary justice systems; and procedures, such as Impact Assessments, for local communities and indigenous peoples to signal unexpected impacts taking place as a consequence of REDD+ projects. Also closely tied to equitable and results-based BDS are MRV and information systems that permit the assessment of benefits, which are conditional on verifiable results, and the subsequent reporting of those benefits to the international community. MRV may be able to resolve some of the issues surrounding titles and land ownership, as well as helping to determine beneficiaries.

Figure 15: Benefit Distribution Systems and the REDD+ Activities, Guidance and Safeguards

- Ensure that REDD+ activities are used to enhance other social benefits
- Develop national forest reference emission levels and/or forest reference levels, including subnational levels in combination or as an interim measure
- Develop national MRV, including integration of subnational monitoring systems into a national monitoring system
- Develop an information system on how the safeguards are addressed and respected
- Undertake activities consistent with national sustainable development needs and goals, including reducing poverty while responding to climate change
- Promote and support the knowledge and rights of indigenous peoples and members of local communities
- Promote and support the full and effective participation of relevant stakeholders in the planning and implementation ofpara. 70activities
- Undertake activities that are results-based
- Promote and support of actions to address the risk of reversals

#### 5.5.2 Key challenges to equitable benefit distribution systems in Mexico

Under Mexico's PROÁRBOL programme and the implementation of its PES projects, CONAFOR has identified several issues related to benefit distribution systems among the participants of PES projects that could potentially become REDD+ participants in the near future.

While the carbon sequestration programme among indigenous communities In Oaxaca owes its success to its benefit distribution sharing scheme, there have also been examples of PES schemes in which the benefits are not shared among members of the implicated communities. This is a key challenge for the development of BDS in Mexico under REDD+ governance.

CONAFOR has identified areas in which communitymembers are not even aware that their community is receiving a payment for the conservation of the forests. The authority of the *ejido* or of the community directly receives the payment and does not distribute the benefits among the other members. There are also areas in which thebeneficiaries may know ofthe paymentbutarenot aware of its relevance. They consider that it is just another governmental subsidy and do not understand that they are receiving an income for a productive activity, namelythe conservation of their forests. CONAFOR therefore faces awareness and monitoring challenges to ensuring the distribution of benefits with tangible conservation and development results. This is a key challenge to address in order to construct MRV systems as required by the Cancun Agreements and to ensure legitimacy of the programme.

Another challenge is related to the decision to allocate governmental support for carbon sequestration projects. Under current rules of operation, Northern landowners face adisadvantage relativeto Southern landowners because they compete for financial resources according to the types of ecosystems and the land area. Northern landowners share a smaller area of land than those in the South, where the extent of the land area is greater and ispreferable for the development of carbon sequestration projects. Under current rules of operation, projects also compete according to their own levels of economic development based on national poverty indices. While Southern projects do address important economic and development needs, thisdoes not imply that no projects developed in the North of the country in which communities also face important levels of poverty. In terms of benefit sharing distribution systems nationwide, this is an important challenge to take into consideration.

A safeguard to considerwith respect toBDS is guaranteeing the lack of duress in contracts of indigenous peoples affected byREDD+ to avoid situations as such as the ones presented in the Inter-American Court of Human Rights earlier this year. At the same time, the government faces the challenge of ensuring that the land tenure rights of rural and indigenous communities will not be affected, even if it does currently have the powerto expropriate land for carbon sequestration purposes according to the General Law on Sustainable Forest Development. This would imply specific activities such as ensuring that the indigenous communities are aware of and fully understand the provisions of any contract and that they have accepted its terms. The experience of carbon sequestration projects in indigenous communities in Oaxaca and in Sierra Gorda could serve as good models for addressing this challenge.

#### 5.5.3 Summary conclusions on formalizing equitable benefit distribution

As a result of lessons learned from past PES projects, Mexico has a good foundation to develop equitable REDD+ BDS that deliver enhanced social benefits to communities. However, the MRV required by the Cancun Agreements to allow payments to be made for results-based activities is a challenge for Mexican authorities.

Mexico could depend on the INE, CONAFOR, GEO Forest Carbon Tracking and other institutions to establish national forest reference emission and/or forest reference levels. It could also developa muiltiscale and multifunction forest monitoring system based on the National Forest Inventory alongside state and community inventories to monitor carbon stocks with little uncertainty, which would be an alternative way to coordinate disparate communities as well as to create information systems for the international community. The participation of community beneficiaries would enhance BDS within communities. Alongside the technical efforts of Federal, State and international agencies, it would allow Mexico to build on data collection, operational analysis, strategic assessment and feedback, each of which are key elements of REDD+. Several opportunities exist that could mitigate these challenges. Nevertheless, existing laws and institutions continue to present the challenges summarized below in **Figure 16.** 

Figure 16: Challenges to Equitable and Results-based BDS for REDD+ in Mexico

- Establishment of safeguards to ensure that benefit sharing and tangible development and conservation targets
- Development of awareness among beneficiaries
- De facto discrimination among Northern and Southern landowners
- Insurance of lack of duress in contracts related to land acquisition of indigenous and rural communities
- Respect of land tenure rights of indigenous and rural communities even if the government has the attribution to expropriate for carbon sequestration purposes
- Effective inclusion of project beneficiaries in MRV schemes

#### **5.6** Further Challenges

#### Institutional capacity for independent field-based MRV

Independent field-based MRV to test results-based practices on the ground is not yet a requirement of the Cancun Agreements as it is for the CDM. However, a number of organizations have recommended independent MRV to complement government and a stakeholder led indicator-based reporting systems. Clark Unless Mexican Federal government, State governments or local communities receive finance that can be extended to retaining those services, they may consider covering costs by devoting a percentage of amounts from existing revolving or future BDS funds to this purpose, or they may consider including payment for such services by the investor as a term in REDD+ project contracts. The work Mexico is currently undertaking with GEO Forest Carbon Tracking will play a key role in the development of independent field-based MRV. However, its relevance for Mexico's MRV as an element of Mexico's REDD+ governance is still pending on the results and success of its current pilot phase.

Institutionalization of climate attributions to strengthen responsibility and mechanisms for the coordination of federal agencies at all levels and departments relevant for the implementation of REDD+

At the federal level, Mexico's Intersecretarial Climate Change Commissionwas created through an administrative decree that granted its Secretaries powersto develop adaptation and mitigation policies to respond to climate change. To institutionalize those powers, amendments have been proposed for the Organic Law of the Federal Public Administration to grantclimate related powers to the Secretaries that are part of the Commission. The inclusion of specific REDD+ powers inthe Organic Law amendments would strengthen state management agencies in the implementation of the REDD+ national programme, would ensure coherence among development policies and would provide certainty to investors and beneficiaries about the responsible institutions governing REDD+ decision making, revision, monitoring and enforcement.

Amending and supplementing the responsibility and mechanisms for coordination of state management agencies at all levels and departments in implementing REDD+

At the local level, it is worth considering the creation of intersecretarial climate commissions composed of the Secretaries of relevant REDD+ States. A revision of state public administration laws would allow theinclusion ofclimate attributions to such Secretaries. This would imply supporting the creation of intersecretarial climate commissions with a REDD+ subcommission or technical commissions (CTC-REDD) among the states that have not yet developed such an institution such as those developed in Campeche and Chiapas. It would be advisable for the REDD+ strategy to include specific mechanisms to coordinate the work of the Federal and State climate commissions and states' CTC-REDD+.

#### **Inheriting land property**

One of the most important challenges faced by rural communities is the acquisition of new land property. According to Mexican Tax Law, there are no taxes on inheritance. However, Mexican Tax Law levies income taxes on the acquisition of any type of property. Therefore, the inheritance of property is *de facto* subject to taxes, which most rural individuals are not able to pay. According to Mexican Notarial procedures, income taxes must be paid before the production of any new deed. This has created a situation in which individuals who are rightful owners of land plots do not have titles of ownership, and the lack of land tenure deeds is an obstacle to their participation in REDD+ schemes.

### 6 Legal and Institutional Innovations of Mexico for REDD+

#### 6.1 Overview

In spite of challenges to legal preparedness for REDD+, Mexico has also proactively pursued policies and programmes that may offer novel solutions. The innovative laws and institutions reviewed below directly or indirectly impact REDD+ planning and implementation, insofar as they are concerned with issues such as effective and participatory forest management, institutional coordination in decentralized governance, two-way information systems, financial accountability measures, incentivizing private sector investments and streamlined legislative reform tools. Mexico's experiences at the sub-national level have proven to be an important source of policy innovation. They include: the joint efforts of Campeche, Yucatan and Quintana Roo to develop a regional REDD+ strategy to encourage the conservation of rainforests in the Sian-KaanCalakmul corridor; Jalisco's accomplishment in the development of intermunicipal forms of environmental management; and Oaxaca's experience in the development of indigenous carbon projects.

#### 6.2 Securing Governance and REDD+ Progress through Regional Accords

The joint efforts of Campeche, Yucatan and Quintana Roo at the subnational level under the Yucatan Peninsula Accord illustratean important case of regional response and policy innovation that has attracted Federal and international attention. Charvilli The decision to pool financial and institutional resources to respond to common challenges and opportunities has not only ensured complementarity between subnational and national climate responses; rather, it has also promoted a regional form of forest organization and management within the Peninsula under a REDD+ scheme. The Yucatan Peninsula REDD+ scheme is one of the three REDD+ pilot projects of CONAFOR and is worth considering as a model for other regional initiatives that could develop in the country. Its experience has set precedent to other regional experiences that are currently in discussion such as a Memorandum of Understanding between Tabasco and Campeche for forest conservation and a regional REDD+ scheme, in a common ecosystem shared by the two states. Charlie Through this potential new collaboration, Tabasco and Campeche's agreement would enhance and complement current initiatives underwayinthe Southeastern states in Mexico.

#### 6.3 Building Stability in REDD+ Policies through Inter-Municipal Networks

The Cancun Agreements require that Parties undertake activities in accordance with existing national development priorities and national legislation. Jalisco's creation of public decentralized organs" among different municipalities for watersheds, with their own personality and patrimony, and the creation of private trust funds for the management of their resources, has proven to be an innovative and effective institutional response to short period governments. Characteristic Having been successful for more than a decade, CONAFOR has chosen to use these institutions as the model to follow for the development of pilot REDD+ projects. The stability of these institutions will be key to the development of successful REDD+ governance.

#### 6.4 Developing Indigenous Carbon Sequestration Credits

A third policy innovation at the subnational level that is worth considering is Oaxaca's experience in the development of indigenous carbon sequestration credits. The success of the original 2004 project legitimized an

initiative that began as a joint effort byCONAFOR and national NGOs. The specific benefits achieved in "the sale of the air," coupled with popular acceptance and appropriation of the programme by its beneficiaries, offers an example of a successful policy that presents an innovative model for the development of REDD+ governance. Classification in the development of REDD+ projects among indigenous communities. Classification in the scheme are of particular relevance for the development of REDD+ in Chiapas, in particular within the *caracoles*.

#### 6.5 Engaging Beneficiaries through Flexible Land Tenure Recognition Systems

The experience of the carbon sequestration project in Sierra Gorda, Queretaro offers important lessons regarding *ad-hoc* carbon sequestration governance, particularly in the mobilization of voluntary climate finance. The allocation scheme of carbon benefits within Sierra Gorda does not follow international standards regarding land tenure requirements. It has established a more flexible procedure based on the social structure of the community. Instead of requiring land tenure deeds, the testimony of the community regarding land tenure rights suffices to grant an *ad-hoc* deed. Through this deed, the members of the community are entitled to participate as beneficiaries of carbon sequestration schemes. At the same time, to guarantee the protection of the beneficiaries, the project establishes that any beneficiary who has signed a carbon sequestration contract needs to follow a capacity building process. This process allows the members of the community to understand the full implication of any carbon sequestration project, its value and how it can be used to enhance their own livelihood. MRV may also help support this.

#### 7 Conclusion

This Country Study has provided a snapshot of Mexico's preparedness with respect to legal and institutional aspects of the Cancun Agreements and REDD+ Activities, Guidance and Safeguards as the country begins to implement the UN-REDD Programme. Specifically, this Country Study has surveyed the laws, regulations, guidance and related instruments of relevance for REDD+ in Mexico, then identified and analyzed key legal and institutional challenges for effective REDD+ policy, and has also featured legal innovations for REDD+ design and implementation.

In the introduction, the Country Study noted that land use change and forestry play an important part of Mexico's vulnerability and adaptability. Forests are one of its most important natural resources and contribute directly to peoples' livelihoods as 60% of the poor population lives in rural areas and more than 70% of the forests are owned and managed by local and indigenous communities. Deforestation and land degradation rates in Mexico, while below the world average, are a matter of significant concern. The predominant drivers of deforestation and forest degradation areconversion to pasture land and slash and burn agriculture, which are responsible for 82% of Mexico's total deforestation and forest degradation. Recent assessments have estimated potential emissions savings from reducing deforestation and potential degradation, with a range from 263 Mtto 333 Mtof CO<sub>2</sub> in the next decade. Therefore, as one of the partner countries in the UN-REDD Programme, Mexico has included forest conservation as one of the main lines of action of its national climate strategy and has committed to redirect the forest sector toward long-term sustainability.

In Part 2, the Country Study provided a focused discussion of the importance of legal preparedness for REDD+ and introduced the main methods used to identify and analyze key challenges in Mexico's legal and institutional framework. In particular, it highlighted that in Mexico, the primary legal instruments include National Strategies, Laws and related guidance as well as State-level Strategies and related regulations. They all play many functions in REDD+ preparedness and furnish government actors with jurisdictional mandates, delineate public and private rights and responsibilities, create project-level programmes, and implement fiscal policies that engage investors. The legal instrument options in the reference tool were drawn from a wealth of sources based on the three pillars of REDD+ governance identified in the UN-REDD Programme and Chatham House, *Guidance for the Provision of Information on REDD+ Governance*.

In Part 3, the Country Study situated REDD+ within Mexico's general governance framework, including its development goals, decentralized governance and laws for public participation and access to information. It noted that Mexico is mid-ranked in the HDI because of its significant disparities in the distribution of wealth and basic social benefits, particularly as between urban and rural areas, where REDD+ activities will occur. Therefore, its long-term development goals of relevance to REDD+ are linked to its respect for human rights, to increasing economic competitiveness and generation of employment in the rural sector, to reducing poverty through integrated development and the direct involvement of indigenous communities while promoting environmental sustainability and increasing the effectiveness of the democratic process. These goals are directly linked to Mexico's signature of numerous international treaties and soft law documents that influence how the federal government and relevant State government authorities undertake the advancement of REDD+ policies and programs.

In Part 4, the Study reviewed the range of existing Federal and State-level laws and institutions in Mexico that are particularly relevant to REDD+ design and implementation, including land tenure, land use planning, energy and electricity, and trade and investments, among others. It found that Mexico has an important legal basis upon which to build its REDD+ legal framework in every aspect relevant to REDD+ governance. As noted by CONAFOR, it is upon this legal framework that the federal and state governments are currently designing their REDD+ initiatives.

In Part 5, the Study drew out the key challenges for legal preparedness for REDD+ in Mexico, focusing on those most pertinent to the Cancun Agreements and REDD+ Activities, Guidance and Safeguards. In particular, it found that the key legal and regulatory gaps or challenges are related to the interrelationship between state and federal laws and policies, the clarity and coherence of laws and institutions related to REDD+ at the federal and state level, the regulation of land use change for effective REDD+ implementation, in particular related to slash and burn agriculture and the benefit distribution systems based on current carbon sequestration PES schemes.

While Mexico has one of the most active subnational climate portfolios, coherence among federal and state legal responses shall be needed for the implementation of REDD+. It would be recommendedforanenactment of a general climate law with a REDD+ chapter or of a REDD+ general law based on current forest law provisions, to take into consideration current subnational efforts in an inclusive manner. This would help to achieve clarity and coherence among different levels of government while respecting existing efforts and responses.

Clarity and coherence in the definition of relevant REDD+ legal terms such as "forest," "carbon," "carbon sequestration," "payment for carbon sequestration services" and "permanence," among others, could strengthen a REDD+ framework. Clarity on the recognition of the legal nature of each of the above and on the eligibility of land for REDD+ projects would also help for an effective implementation of REDD+. Coherence with indigenous rights

would be important to the establishment of effective REDD+ Activities, Guidance and Safeguards, and the inclusion of conservation services as a productive service within the *Agrarian Law* to classify plots of land could help to achieve coherence with existing environmental laws. The recognition of the latter would allow to reaching coherence among overlapping jurisdictions between the environmental and agriculture sectors.

Policy accords between overlapping institutional jurisdictions among environmental and agriculture Secretaries at the Federal and State levels are an important alternative to respond to slash and burn challenges as the main driver of Mexico's deforestation. The recognition of independent land use jurisdictions at the Federal, State and municipal levels as well as among *ejidos* and *caracoles* is key for a dialogue among rural communities and governmental agencies. It is also keytothe inclusion of benefit sharing schemes and tangible development and conservation aims. At the same time, given the presence of indigenous communities in potential REDD+ areas, the translation of the existence of climate change into their language, traditions and cosmogonies should be considered a high priority for the development of any carbon sequestration and REDD+ projects within those communities. This is directly linked with the development of awareness among beneficiaries and insuring lack of duress in land contracts as a safeguard for the most vulnerable communities.

Further challenges include developing institutional capacity for independent field-based MRV based on the lessons of current national forest inventories, institutionalizing climate attributions at the Federal and State level to strengthen responsibility and to create coordination mechanisms among relevant agencies for the development of REDD+, and the tax treatment of land inheritance among rural communities. National, well planned MRV methods could fullill many gaps still present for the implementation of REDD+.

In the final substantive Part 6, the Country Study features certain innovative legal and institutional reforms that are presently underway in Mexico at the local, State and national levels that will directly or indirectly affect REDD+ implementation. In particular, it is found that the world can learn from Mexico's lessons. Its success creating subnational and intermunicipal agreements via the *Yucatan Peninsula Accord*, a potential MoU between Campeche and Chiapas, and the intermunicipal public decentralized organs in Jalisco show Mexico's innovativeness to develop new institutions that allow to pool resources to respond to common opportunities and vulnerabilities. Carbon sequestration projects in the Sierra Gorda and among Oaxaca's indigenous communities are clear examples of successful local governance in which the response to carbon sequestration schemes is adapted to the cultural, socioeconomic and institutional realities of the beneficiary communities.

In conclusion, it is important to note that while a broad-brush survey has been presented above, more legal research and careful assessment is necessary, particularly since these new policies and laws are still only emerging, and new solutions are just being tested to implement this new REDD+ mitigation and financing mechanism. Furthermore, a great deal of technical assistance and support will be needed to provide tailored regulatory solutions that are appropriate to specific countries and to ensure the engagement and ownership that can make REDD+ a reality in law and policy. And finally, to implement any tailored legal and regulatory reforms, legal and institutional strengthening and capacity building, at international, national and local levels, will be essential.

<sup>ix</sup>Ibid.

http://www.semarnat.gob.mx/temas/cambioclimatico/Documents/pecc/090828 PECC.Capitulos DOF.pdf.

<sup>&</sup>lt;sup>1</sup> UNDP Human Development Reports, Online: http://hdrstats.undp.org/en/countries/profiles/MEX.html;

ii Decision 1/CP.16 Cancun Agreements: Outcome of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention.

This is adapted from a broader definition of "institutions" in FAO and Profor, Framework for Assessing and Monitoring Forest Governance (Rome, 2011).

<sup>&</sup>lt;sup>IV</sup> See for instance: ICV, Imazon and WRI, *The Governance of Forests Toolkit (v.1)* (September 2009); FAO and Profor, *Framework for Assessing and Monitoring Forest Governance* (Rome, 2011).

VUN-REDD Programme and Chatham House, Guidance for the Provision of Information on REDD+ Governance (Draft) (June 2011) at 4.

vi UN-REDD Programme and Chatham House, Guidance for the Provision of Information on REDD+ Governance (Draft) (June 2011) at Table 1.

vii Other important sources are listed in the References section.

viii Cf. Mexico, Diario Oficial de la Federación, Constitución política de los Estados Unidos Mexicanos, February 5, 1917 (lastamendment June 20, 2011) art. 27.

<sup>&</sup>lt;sup>x</sup>Cf. México, Diario Oficial de la Federación, *Ley General del Equilibrio Ecológico y Protección al Ambiente*, January 28, 1988 (lastamendmentJanuary 28, 2011).

<sup>&</sup>lt;sup>xi</sup>Cf. Mexico, Diario Oficial de la Federación, Ley Reglamentaria del Artículo 27 Constitucional en el Ramo del Petróleo, November 29, 1958 (last amendment November 28, 2008).

xii Cf. Mexico, DiarioOficial de la Federación, Ley para el Aprovechamiento de EnergíasRenovables y el Financiamiento de la TransiciónEnergética, November 28, 2008 (last amendmentJune 1, 2011).

xiii Cf. Mexico, Diario Oficial de la Federación, Ley de desarrollo rural sustentable, December 7, 2001 (lastamendmentJanuary 27, 2011).

xiv Cf. Mexico, Diario Oficial de la Federación, Ley general de desarrollo forestal sustentable, 25 de febrero de 2003 (lastamendment of November 24, 2008).

xvCf.Mexico, DiarioOficial de la Federación, Ley Minera, June 26, 1992 (last amendment June 26, 2006).

xvi*Cf.* Mexico, DiarioOficial de la Federación, *Ley de Planeacion*, January 5, 1983 (last amendment June 20, 2011).

<sup>&</sup>lt;sup>xvii</sup>Cf. Mexico, DiarioOficial de la Federación, *Ley delServicioPúblico de EnergíaEléctrica*, December 22, 1975 (last amendment June 1, 2011).

xviii Cf. ConstituciónPolítica de los EstadosUnidosMexicanos, art. 124.

xix Cf. ibid. at Article 115(V).

<sup>\*\*</sup>Cf. ibid.at Article 73 XXIX-G.

<sup>&</sup>lt;sup>xxi</sup>Cf. Ley general del equilibrio ecológico y la protección al ambiente, Articles 7 and 11.

xxii Cf. Ley general de desarollo forestal sustentable, Article 13.

xxiii Cf. Ciudad de México, Gaceta Oficial, Decreto por el quese expide la Ley de Mitigación y Adaptación al Cambio Climático y Desarrollo Sustentable para el Distrito Federal, June 16, 2011.

xxiv Cf. Decision 1/CP.16 Cancun Agreements, Appendix I.1 (c),(d),(e).

xxvCf. ibid. Appendix I. 2(a).

xxvi*Cf. ibid.* Para. I.8; Appendix I, para. 2(a).

xxvii See UNDRIP and ILO Convention No. 169, generally, and Principle 22 of the RioDeclaration, which states "Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development."

xxviii Cf. Decision 1/CP.16 Cancun Agreements, Appendix, paras. I.8, III.C.71(c), 72; Appendix I, para. 2(a).

xxix Cf. Mexico, DiarioOficial de la Federación, Pacto internacional de derechos civiles y políticos, May 20, 1981, art. 25(a).

xxx Cf. UNGA, United Nations Declaration on the Rights of Indigenous Peoples, Resolution 217 61/295, September 13, 2007, art. 18.

See for instance Arts. (3a), 10(e), and 19(1) of the 1994 UN Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa; and Arts.8(j) of the Convention on Biodiversity.

Agenda 21, approved by the UN Conference on Environment and Development on 13 June 1992, UN doc A/CONF.151/26 (vols I–III) (1992), Preamble to Ch.23.

xxxiii Cf. Mexico, Diario Oficial de la Federación, *Programa Especial de Cambio Climático (PECC) 2009-2012*, August 28, 2009 (amendmentOctober 7, 2010) available at

- xxxiv Cf. Gobierno del Estado de Nuevo León, Secretaría de Medio Ambiente y Recursos Naturales, Instituto Nacional de Ecología, Tecnológico de Monterrey, Embajada Británica en México, *Programa de Acción ante el Cambio Climático Nuevo León 2010-2015*, June 2010.
- xxxx Cf. Secretaría de Medio Ambiente del Gobierno de la Ciudad de México, Mexico City, *Programa de Acción Climática de la Ciudad de México 2008-2012*, September 2008.
- xxxxi Cf. Gobierno del Estado de Veracruz, Universidad de Veracruz, University of Veracruz, Instituto Nacional de Ecología, National Embajada Británica, Centro de Ciencias de la Atmósfera-UNAM, Instituto de Ecología, *Programa Veracruzano ante el Cambio Climático*, June 2009.
- xxxvii Cf. Veracruz, Gaceta Oficial del Estado de Veracruz, Ley Número 878 Estatal de Mitigación y Adaptación ante los Efectos del Cambio Climático, November 3, 2010.
- xxxiii Cf. Gobierno del Estado de Chiapas et al., Programa de Acción ante el Cambio Climático del Estado de Chiapas, April 2011, available at http://www.cambioclimaticochiapas. org/portal/descargas/consulta/paccch\_consulta.pdf.
- xxxix [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
- xlCf. Mason Case, Sarah, Del Villar Arias, Liliana, Olawuyi, Damilola, IDLO-CISDL Compendium of Best Practices on Climate Change Policy, (IDLO-CISDL, Rome 2011).
- xii [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
- xlii Cf. ibid, art. 7 and 29.
- [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
- xliv [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
- xIV Cf. Gobierno del Estado de Chiapas et al., Programa de Acción ante el Cambio Climático del Estado de Chiapas, April 2011, available at http://www.cambioclimaticochiapas. org/portal/descargas/consulta/paccch\_consulta.pdf.
- <sup>xlvi</sup>Cf. Chiapas, Periódico Oficial del Estado, *Ley para la Adaptación y Mitigación ante el Cambio Climático en el Estado de Chiapas*, December 2010.
- Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
- xiviii [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
- xiix [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
- [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
- [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
- <sup>lli</sup>Cf. Gobiernos de los Estados de Yucatán, Campeche y Quintana Roo, Acuerdo General de Coordinación con el Objeto de Desarrollar un Marco de Cooperación y Coordinación Interestatal para Llevar a Cabo Acciones y Estrategias conjuntas para Abordar la Adaptación, Mitigación y Reducción de la Vulnerabilidad al Cambio Climático en la Península de Yucatán, December 7, 2010, cláusula cuarta.
- [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
- liv Inter-American Commission on Human Rights, Land Tenure and Human Rights of Indigenous Peoples in Mexico, Session 141, March 28, 2011.
- <sup>™</sup>Cf. Mexico, REDD Readiness Progress Fact Sheet: Country Mexico, (The Forest Carbon Partnership Facility), June 2011, available at
- $\frac{https://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/Jun2011/FCPF%20-%20Mexico%20Progress%20Sheet%20-%20June2011.pdf.$
- %20Mexico%20Progress%20Sheet%20-%20June2011.pdf.

  Ni Cf. UNGA, Universal Declaration of Human Rights, Resolution 217 A (III), December 10, 1948, arts. 27.1 and 27.2; Mexico, DiarioOficial de la Federación, International Covenant of Economic, Social and Cultural Rights, May 12, 1981, art. 15; Mexico, DiarioOficial de la Federación, International Covenant of Civil and Political Rights, May 20, 1981, art. 27; Office of the High Commissioner of Human Rights, General Comment No. 23: The rights of minorities (Art. 27), CCPR/C/21/Rev.1/Add.5,April 8, 1994, available at http://www.unhchr.ch/tbs/doc.nsf/(Symbol)/fb7fb12c2fb8bb21c12563ed004df111?Opendocument.
- <sup>Mil</sup>Cf. UNGA, United Nations Declaration on the Rights of Indigenous Peoples, Resolution 217 61/295, September 13, 2007, art. 29.

```
lviii Cf. Mexico, Diario Oficial de la Federación, Convenio sobre la diversidad biológica, May 7 1993 (ratified January 13, 1993) and
Mexico, Diario Oficial de la Federación, Convenio 169 de la Organización internacional del trabajo, January 24, 1991.
<sup>lix</sup>Cf. Mexico, Diario Oficial de la Federación, Constitución política de los Estados Unidos Mexicanos, February 5, 1917
(lastamendment June 20, 2011) arts. 2.V and 2.VI.
<sup>IX</sup>Cf. ibid. art. 27.VII.
lxi Cf. México FRA 2010.
kiii Cf. Ley general de desarrollo forestal sustentable, art. 61.
Cf. ibid., arts. 61 and 75.
lxiv Cf. Mexico, Diario Oficial de la Federación, Ley Agraria, February 26, 1992 (lastamendment of June 22, 2011), art. 9.
lxvCf. ibid. art. 10.
Cf. ibid. art. 44.
cf. ibid. art. 47.
kviii Cf. ibid. art. 45.
lxix Cf. ibid. art. 23.V.
lxx Cf. ibid. art. 22.
bxiCf. ibid. art. 23.VI, VIII, IX, X, XI, XII, XIV.
<sup>lxxii</sup>Cf. ibid. art. 29.
cf. ibid. art. 59.
lxxiv Cf. ibid. art. 48.
lxxvCf. ibid. art. 46.
cf. ibid. art. 51.
lxxvii Cf.ibid. art. 50
cf.ibid. art. 116.
lxxix Cf. Ley General del Equilibrio Ecológico y Protección al Ambiente, art. 55 Bis.
lxxx Cf.Ley General de DesarolloForestalSustentable, art. 30
lxxxiCf.ibid.art.112
İxxxii Cf.ibid. art.117.
lxxxiii Cf. ibid. art.117.
\stackrel{\text{loxxiii}}{Cf}. Mexico, DiarioOficial de la Federación, Reglamento de la Ley Minera, February 10, 1999.
lxxxiv Cf. Ley Reglamentaria del Artículo 27 Constitutional en el RamodelPetróleo, art. 7.
lbid. art. 9.
<sup>lxxxvi</sup>Cf. Ley Agraria
lxxxvii Cf. Constitución política de los Estados Unidos Mexicanos, art. 27.
kxxxviii Cf. Mexico, DiarioOficial de la Federación, Ley de AguasNacionales ,December 1, 1992 (last amendment June 20, 2011).
lxxxix Cf. ibid.art. 12 bis.
xcCf. ibid.art.113.
xciCf. ibid.art.78-81.
xcii Cf. ibid. Capitulo II, II & III BIS
xciii Cf. Ley General del Equilibrio Ecologico y la Proteccion del Ambiente, art. 44.
xciv Cf. ibid.art.45.
xcv Cf. Mexico, Diario Oficial de la Federación, Ley General de Vida Silvestre, July 3, 2000 (last amendment June 7, 2011).
xcvi J. Costenbaden ed., Legal Frameworks for REDD: Design and Implementation at the National Level (IUCN, 2009) at 168,
xcviiCf. Ley general de desarrollo forestal sustentable.
xcviii Cf. Mexico, Diario Oficial de la Federación, Reglamento de la ley general de desarrollo forestal sustentable, February 21,
```

<sup>c</sup>Cf. Aguascalientes, Periódico Oficial del Estado de Aguascalientes, Ley de Fomento para el Desarrollo Forestal Sustentable del Estado de Aguascalientes, September 11, 2006; Baja California, Periódico Oficial No. 20, Ley de Desarrollo Forestal Sustentable para el Estado de Baja California, April 30, 2010, art. 3; Baja California Sur, Ley de Desarrollo Forestal Sustentable para el Estado de Baja California Sur, December 13, 2007, art. 5 and 6; Campeche, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable para el Estado de Campeche, March 7, 2008, arts. 3 and 4; Chiapas, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable del Estado de Chiapas, October 29, 2008, arts. 2.II and 2.XXXVIII; Chihuahua, Ley de Fomento para el Desarrollo Forestal Sustentable del Estado de Chihuahua, May 22, 2004 (lastamendmentNovember 20, 2010) arts. 5 and 6; Coahuila, Periódico Oficial del Estado, Ley Forestal del Estado de Coahuila de Zaragoza, October 1, 2006, (lastamendment June 6, 2008) arts. 7 and 8; Colima, Periódico Oficial del Estado, Ley para el Desarrollo Forestal Sustentable del Estado de Colima,

August 12, 2006, arts. 5 and 6; Durango, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable del Estado de

2005, art. 2.V. xcix Cf. ibid, art. 2.XXXI.

Durango, June 13, 2004 (lastamendmentMarch 25, 2011) arts. 5 and 6; Guanajuato, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable para el Estado y los Municipios de Guanajuato, March 15, 2005, arts. 5 and 6; Hidalgo, Periódico Oficial, Ley de Desarrollo Forestal Sustentable para el Estado de Hidalgo, August 7, 2006 (lastamendmentDecember 13, 2010), art. 8; Jalisco, Periódico Oficial del Estado de Jalisco, Ley de Desarrollo Forestal Sustentable para el Estado de Jalisco, 20 de julio de 2004 (lastamendmentOctober 20, 2007) art.4; Nayarit, Periódico Oficial del Estado de Nayarit, Ley de Desarrollo Forestal Sustentable para el Estado de Nayarit, July 16, 2005, arts. 4 and 5; Quintana Roo, Periódico Oficial del Estado, Ley Forestal del Estado de Quintana Roo, December 17, 2007, art. 4; Querétaro de Arteaga, Periódico Oficial del Gobierno del Estado de Querétaro, Ley Forestal Sustentable del Estado de Querétaro, July 31, 2009, arts. 5 and 6; San Luis Potosí, Periódico Oficial del Estado, Ley de Fomento para el Desarrollo Forestal Sustentable del Estado de San Luis Potosí, October 18, 2005, arts. 5 and 6; Tamaulipas, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable para el Estado de Tlaxcala, August 16, 2004, art.5; Veracruz, Gaceta Oficial del Estado de Veracruz, Ley de Desarrollo Forestal Sustentable para el Estado de Veracruz de Ignacio de la Llave, July 14, 2006, arts. 3 and 5; and Zacatecas, Periódico Oficial del Estado de Zacatecas, October 8, 2006, art. 6.

<sup>ci</sup>Cf. Michoacán, Periódico Oficial del Estado, *Ley de Desarrollo Forestal Sustentable para el Estado de Michoacán de Ocampo*, November 22, 2004 (lastamendmentAugust 23, 2007), art. 5.VII.

<sup>cii</sup>Cf. Mexico, Secretaría de Economía, Diario Oficial de la Federación, *Declaratoria de vigencia de la Norma Mexicana NMX-AA-143-SCFI-2008, Para la certificación del manejo sustentable de los bosques (que cancela la declaratoria de vigencia de la NMX-AA-143-SCFI-2008*, publicada el 21 de agosto de 2008), September 8, 2008.

ciii Cf. SEMARNAT, CONAFOR, INEGI, INE, INIFAP, Documento Estratégico Rector del Inventario Nacional Forestal y de Suelos (Mexico, April 2004) available at

http://148.223.105.188:2222/gif/snif\_portal/secciones/inventarionacional/documentos/DocumentoEstrategicoRector.pdf. (Documento Estratégico del Inventario Nacional).

civ México, Evaluación de los Recursos Forestales Mundiales 2010: Informe Nacional México, FRA2010/132(Rome, 2010)available at http://www.fao.org/docrep/013/al567S/al567S.pdf. (México FRA 2010).

<sup>cv</sup>Cf. Gobierno Federal, SEMARNAT, CONAFOR, *Visión de México sobre REDD+: Hacia una Estrategia Nacional* (CONAFOR, Mexico 2010).

<sup>cvi</sup> [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]

cvii COP Decision 16/CMP.1

cviii Cf. Mexico, Diario Oficial de la Federación, Acuerdo por el que se crea con carácter permanente la Comisión intersecretarial de cambio climático, April 25, 2005.

c<sup>ix</sup>Cf. Mexico, Diario Oficial de la Federación, *Reglamento Interno de la Comisión Intersecretarial para el Desarrollo Rural Sustentable*. June 19, 2002, art. 5.

<sup>cx</sup>Cf. Mexico, Diario Oficial de la Federación, Ley Orgánica de la Administración Pública Federal, December 29, 1976 (lastamendment June 17, 2009), art. 32.Bis.XXXIX.

cxi*Cf.* ibid. art. 35.XX.

cxii Cf. ibid. art. 34.III.

<sup>cxiii</sup>Cf. Mexico, Diario Oficial de la Federación, Acuerdo Presidencial de Creación de la Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, and Mexico, Diario Oficial de la Federación, Modificaciones al Acuerdo Presidencial de Creación de la Comisión Nacional para el Conocimiento y Uso de la Biodiersidad.

cxiv Cf. Mexico, Diario Oficial de la Federación, Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales, January 21, 2003 (last amendment August 24, 2009), Capítulo Décimo.

cxv Cf. ibid. Capítulo Décimo Primero.

cxvi Cf. Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales, art. 7.

cxvii Cf. Mexico, Diario Oficial de la Federación, Estatuto Orgánico de la Comisión Nacional Forestal, August 7, 2006.

cxviii Cf. Ley de desarrollo rural sustentable, art. 22.f).

cxixCf. ibid., art. 32.XII.

 $^{\text{cxx}}\textit{Cf}.$  ibid., arts. 12.X, 12.XI, 13.X and 15.XII.

cxxiCf. ibid., arts. 16.XII, XIII and XIV.

cxxii Cf. ibid. arts. 17 y 22.X, 22.XII and 22.XV.

cxxiii Cf. Documento Estratégico del Inventario Nacional, n X.

cxxiv Cf. CONAFOR, Tipos de Vegetación Forestal y de Suelos, available at

http://148.223.105.188:2222/gif/snif portal/index.php?option=com content&task=view&id=12&Itemid=7 and México FRA 2010, n X.

<sup>cxxv</sup>Cf. Tipos de Vegetación Forestal y de Suelos, n X.

```
cxxviCf. ibid.
cxxvii Cf. México FRA 2010.
CXXVIII Cf. CONAFOR, Inventario Nacional Forestal y de Suelos 2004-2009, available at http://cnf.gob.mx/infys.
<sup>CXXIX</sup>Cf. Leygeneraldedesarrolloforestalsustentable, n X, art. 48 and 49.
<sup>CXXX</sup>Cf. Reglamento de la ley general de desarrollo forestal sustentable, art. 13.
cxxxi Cf. ibid, art. 14.
cxxxii Cf. Leygeneraldedesarrolloforestalsustentable, n X, art. 74
cxxxiii Cf. ibid. art. 77.
cxxxiv Cf. ibid. art. 76.
cxxxvCf. ibid. arts. 75, 80 and 81.
cxxxvi Cf. ibid. art. 83.
cxxxvii Cf. ibid. art.79
cxxxviii Cf. ibid. art. 58.
cxxxix Cf. ibid. art. 85.
[Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change
Conference, Mexico City, September 2011]
<sup>cxli</sup>Cf. Ley general de desarrollo forestal sustentable, arts. 65-8.
cxlii Cf. Mexico, DiarioOficial de la Federación, Código Penal Federal, August 14, 1931 (lastamendment June 8, 2011), arts. 417-9.
<sup>cxliii</sup>Cf. PROFEPA, Cero Tolerancia a la Tala Clandestina a Nivel Nacional, June 2011, available at
http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero tolerancia a la tala clandestina a nivel nacional.html.
<sup>cxliv</sup>Cf. PROFEPA, Comités de Vigilancia Ambiental, June 2011, available at
http://www.profepa.gob.mx/innovaportal/v/1555/1/mx/comites de vigilancia ambiental participativa en materia forestal.
cxlvCf. PROFEPA, Operativos Forestales Especiales, June 2011, available at
http://www.profepa.gob.mx/innovaportal/v/1529/1/mx/operativos especiales en materia forestal.html.
<sup>cxivi</sup>Cf. Ley General de Desarrollo Forestal Sustentable and Mexico, art. 7.XXXVII and Diario Oficial de la Federación, Ley de
desarrollo rural sustentable, December 7, 2001 (lastamendmentJanuary 27, 2011) art. 3.XXX.
cxlvii Cf. Felicani Robles, Francesca, CarbonRights in REDD+: The Case of Mexico, REDD.net, January 2011, available at http://redd-
net.org/files/Mexico%20case%20study%20final.pdf.
cxiviii Cf. Secretaría de Medio Ambiente y Recursos Naturales, Comisión Nacional Forestal, Programa estratégico forestal para
México 2025, 18 de agosto de 2001 available athttp://era-mx.org/biblio/PEF 2025.pdf.
cxlix Cf. Ley general de desarrollo forestal sustentable, arts. 29, 30, 32.II, 34.XIII-XIV and 133.
<sup>cl</sup>Cf. ibid, arts. 2.III, 3.XIV and 4.II.
cli Cf. Secretaría de Medio Ambiente y Recursos Naturales, Diario Oficial de la Federación, Acuerdo que establece las reglas de
operación para el otorgamiento de pagos del Programa de servicios ambientales hidrológicos, October 3, 2003 and Secretaría
de Medio Ambiente y Recursos Naturales, Diario Oficial de la Federación, Acuerdo por el que se modifica el diverso que
establece las Reglas de Operación para el otorgamiento de pagos del Programa de Servicios Ambientales Hidrológicos,
publicado el 3 de octubre de 2003, June 18, 2004. cili Cf. Secretaría de Medio Ambiente y Recursos Naturales, Diario Oficial de la Federación, Acuerdo que establece las reglas de
operación para el otorgamiento de pagos del Programa para desarrollar el Mercado de servicios ambientales por captura de
carbón y los derivados de la biodiversidad y para fomentar el establecimiento y mejoramiento de sistemas agroforestales (PSA-
CABSA), November 24, 2004.
cliii Cf. Patrick ten Brink, ed. The Economics of Ecosystems and Biodiversity in National and International Policy Making (Earthscan:
London, 2011) at 189.
<sup>cliv</sup>Cf. Oaxaca, ejemplo en la neutralización de emisiones de carbono en el Día mundial del medio ambiente, available at
http://www.mexicoforestal.gob.mx/images/contenido/100602 bonos carbono oaxaca.pdf.
civ Cf. Alianza para la conservación de la Reserva de la biosfera Sierra Gorda, Canasta de productos y servicios ecosistémicos:
Reserva de la biosfera Sierra Gorda (Mexico)available at http://www.carbonneutralplanet.org/canasta.pdf.
clvi Cf. CONAFOR, Coordinación General de Producción y Productividad, Servicios ambientales y cambio climático (Mexico 2010).
ctvii Cf. Constitución política de los Estados Unidos Mexicanos, arts. 2.1, V and VII.
clviii Cf.Ley General del Equilibrio Ecologico y Proteccion del Ambiente, art. 157.
clix Cf. ibid. art. 158.
clx Cf. ibid. art.159 BIS.
clxi Cf. ibid. art. 189.
clxii Cf. Mexico, DiarioOficial de la Federación, Ley de Amparo, Reglamentaria de los Artículos 103 y 107 de la Constitución Política
de los Estados Unidos Mexicanos, January 10, 1936 (last amendmentJune 24, 2011).
clxiii Cf. ibid. art. 1
```

```
clxiv Cf. ibid. art.4
```

athttp://wbcarbonfinance.org/Router.cfm?Page=PMR&FID=61218&ItemID=61218&ft=About.

chxiv Cf. Mexico – Forest Carbon Partnership, available at http://www.forestcarbonpartnership.org/fcp/node/74.

clxxvi Cf. Ecosystem Marketplace & Bloomberg New Energy Finance, Back to the Future: State of the Voluntary Carbon Markets

clxxvii Cf. Guidance for the Provision of Information on REDD+ Governance (Draft), 10.

(Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]

clxxix [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]

clxxx [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]
clxxxi [Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change

Conference, Mexico City, September 2011]

[Reference to papers given by relevant National and State-level authorities in Legal Preparedness for Climate Change Conference, Mexico City, September 2011]

clxv Cf. LeydelServicioPúblicode EnergíaEléctrica.

clxvi Cf. Constitución política de los Estados Unidos Mexicanos, art. 27.

clxvii Cf. Ley para el Aprovechamiento de EnergíasRenovables y el Financiamiento de la TransiciónEnergética.

clxviii Cf. ibid. art.1

clxix Cf. ibid. art.2.

clxx Cf. Ley de Promoción y Desarrollo de los Bioenergéticos.

cloxi Cf. C. Jull et al., Recent Trends in the Law and Policy of Bioenergy Production, Promotion and Use (FAO, 2007) at 28-29.

clxxii Cf. About GEF, Online: http://www.thegef.org/gef/whatisgef,

cbxiii Cf. GEF-Administered Trust Funds, Online: http://www.thegef.org/gef/trust\_funds.

clxxiv Cf. Partnership for Market Readiness, available

# **Annexes**

Annex 1 Legal Preparedness for REDD+ Considerations and Related Instruments

Annex 2 Mexican Federal and Subnational Laws Reviewed

Annex 3 Mexican Policies & Programs Relevant to REDD+

**Annex 4 Persons Consulted** 

**Annex 5 List of Figures** 

**Annex 6 References** 

	Legal Considerations	Cancun Agreements provisions	Related Legal Instrument Options
1.	Ensure that REDD+ activities are used to enhance social benefits.	I.10. Realizes that addressing climate change requires a paradigm shift towards building a low-carbon society that offers substantial opportunities and ensures continued high growth and sustainable development, based on innovative technologies and more sustainable production and consumption and lifestyles, while ensuring a just transition of the workforce that creates decent work and quality jobs;  Appendix I  2. When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:  (e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits;FN1  FN 1 Taking into account the need for sustainable livelihoods of indigenous peoples and local communities and their interdependence on forests in most countries, reflected in the United Nations Declaration on the Rights of Indigenous Peoples, as well as the International Mother Earth Day.	<ul> <li>Participatory decision-making procedures to determine appropriate levels, nature and timing of monetary and non-monetary benefit distribution for local communities and indigenous peoples, including ex-ante support for start-up costs</li> <li>Rules for the entitlement to and how benefits will be distributed among investors, landowners, government, local communities and indigenous peoples and persons engaged in forest management (i.e. for opportunity costs, traditional knowledge, employment, management, royalties)</li> <li>Enforceable provisions for free, prior and informed consent (FPIC) in all REDD+ activities that affect stakeholders, particularly local communities and indigenous peoples</li> <li>Labour and employment standards that take into account freedom of association and decent work conditions</li> <li>Procedures, such as Impact Assessments and indicator-based reporting, for local communities and indigenous groups to signal unexpected impacts taking place as a consequence of REDD+ projects</li> <li>Risk sharing mechanisms to insure recoverable damages for disputes between employed persons, public authorities, and national and international investors</li> <li>Pricing tools, value addition and other incentives to promote alternative and sustainable livelihoods, for instance from non-wood forest products or ecotourism</li> <li>Clear and defined rights to land, forests and carbon ownership, use and transfer that support the assessment of benefit distribution systems</li> <li>Legal education on designing and drafting REDD+ contracts for local communities, indigenous peoples and persons undertaking forest management activities</li> </ul>
2.	Fully respect human rights	I. 8. Emphasizes that Parties should, in all climate change related actions, fully respect human rights	<ul> <li>Incorporation of human rights legislation and international commitments in REDD+ strategies and action plans (i.e. Bills of Rights, International Covenant on Economic, Social and Cultural Rights, International Covenant on Civil and Political Rights, Convention on the Elimination of All Forms of Discrimination Against Women, Universal</li> </ul>

			Declaration of Human Rights)
			Guarantees against discriminatory practices by political and traditional administrations in all REDD+ related projects, particularly with respect to property rights
			Access to justice through dispute resolution mechanisms that are accessible, effective and enforceable
3.	Address the drivers of deforestation and forest degradation	<ul> <li>III.C. 68. Encourages all Parties to find effective ways to reduce the human pressure on forests that results in greenhouse gas emissions, including actions to address drivers of deforestation;</li> <li>72. Also requests developing country Parties, when developing and</li> </ul>	<ul> <li>Clarity and coherence of laws and institutional mandates across multiple sectors and jurisdictions with respect to REDD+ activities (i.e. energy, agriculture, minerals and mining, infrastructure, transportation, national, provincial, local)</li> <li>Incorporation of cross-sectoral policies and programmes in REDD+ strategies and action</li> </ul>
		implementing their national strategies or action plans, to address, inter alia, the drivers of deforestation and forest degradation, land tenure	plans
		issues, forest governance issues, gender considerations and the safeguards identified in paragraph 2 of appendix I to this decision, ensuring the full and effective participation of relevant stakeholders,	Coordination through inter-ministerial committees, working groups and crosscutting teams
		inter alia indigenous peoples and local communities;	Repeal of laws and regulations that create perverse incentives, such as subsidies
			Economic incentives to reduce the human pressure on forests in key sectors, such as tariffs, tax exemptions, subsidies, public-private partnerships, power purchasing agreements, loans and grants
			Clarification of the hierarchy of competing interests in land use planning (i.e. easements, exceptions, expropriation, concessions, subsurface rights)
			Prohibition, licensing and enforcement of deforestation and forest degradation reflecting actual implementation capacity, including community policing
			Monetary and non-monetary substitutes for unsustainable practices, including guaranteed livelihoods through new employment or provision of new sources of food and energy
4.	Develop a national REDD+ strategy or	71. Requests developing country Parties aiming to undertake the activities referred to in paragraph 70 above, in the context of the	Key definitions consistent with international commitments and finance mechanisms
	action plan	provision of adequate and predictable support, including financial resources and technical and technological support to developing country Parties, in accordance with national circumstances and respective	Project cycle procedures for approval, verification, data collection, auditing, reconciliation, emissions registration, and social and environmental impact assessment
		capabilities, to develop the following elements:  (a) A national strategy or action plan;	Clear, consistent and coherent responsibility for REDD+ design, implementation and finance at different levels and sectors of governance
		72. Also requests developing country Parties, when developing and implementing their national strategies or action plans, to address, inter alia, the drivers of deforestation and forest degradation, land tenure	Clarification of tax and royalty treatment of investments, carbon credits earned or traded and benefit distribution systems

		issues, forest governance issues, gender considerations and the safeguards identified in paragraph 2 of appendix I to this decision, ensuring the full and effective participation of relevant stakeholders, inter alia indigenous peoples and local communities;  78. Also requests Parties to ensure coordination of the activities referred to in paragraph 70 above, including of the related support, particularly at the national level;	<ul> <li>Determination of foreign investment and trading rules on ownership and use of carbon credits and export duties</li> <li>Identification of whether carbon ownership is linked to the land, trees or other, where ownership lies and how it can be transferred</li> <li>Rules on public and private entitlements to directly enter into contracts for REDD+ projects, public-private partnerships and public procurement laws</li> <li>Enforceable public access to clear information on REDD+ procedures, applications and projects</li> <li>Incorporation of the REDD+ Safeguards and issues, inter alia, the drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations</li> </ul>
5.	Develop national forest reference emission and/or forest reference levels, including subnational forest reference emission levels and/or forest reference levels in combination and/or as an interim measure	III.C. 71. Requests developing country Parties aiming to undertake the activities referred to in paragraph 70 above, in the context of the provision of adequate and predictable support, including financial resources and technical and technological support to developing country Parties, in accordance with national circumstances and respective capabilities, to develop the following elements:  (b) A national forest reference emission level and/or forest reference level6 or, if appropriate, as an interim measure, subnational forest reference emission levels and/or forest reference levels, in accordance with national circumstances, and with provisions contained in decision 4/CP.15, and with any further elaboration of those provisions adopted by the Conference of the Parties; FN6  FN6 In accordance with national circumstances, national forest reference emission levels and/or forest reference levels could be a combination of subnational forest reference emissions levels and/or forest reference levels and/or forest reference levels.	<ul> <li>Incorporation of international modalities for the development of reference levels into national and subnational policies, such as historical baselines or projections of future trends in the forestry sector</li> <li>Coordination of subnational, inter-subnational and/or national institutions for data collection</li> <li>Definition of the relationship among national reference levels, subnational projects, emission displacements and benefit sharing distribution systems</li> <li>Establishment of carbon emissions registries to enable credits to be issued, transferred and retired</li> </ul>
6.	Develop national MRV including the integration of subnational monitoring systems into a national monitoring system and/or as an interim measure	III.C. 71. Requests developing country Parties aiming to undertake the activities referred to in paragraph 70 above, in the context of the provision of adequate and predictable support, including financial resources and technical and technological support to developing country Parties, in accordance with national circumstances and respective capabilities, to develop the following elements:  (a) A robust and transparent national forest monitoring system for the monitoring and reporting of the activities referred to in paragraph 70 above, with, if appropriate, subnational monitoring and reporting as an interim measure, FN7 in accordance with national circumstances, and	<ul> <li>Credible and transparent institutions and standards to measure, certify and verify carbon at local, subnational and national level results</li> <li>Development of criteria or indicator-based data collection and reporting</li> <li>Funds or contractual provisions with investors or community members to finance independent field-based MRV and review of data</li> <li>Transparent and accountable financial institutions, including for reporting, auditing and</li> </ul>

	with the provisions contained in decision 4/CP.15, and with any further elaboration of those provisions agreed by the Conference of the Parties;		reconciliation
		characteristic or ansact provisions agreed by the content of the characteristic or and characteristic or an experience of the characteristic or an experience of the characteristic or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experience or an experie	Anti-corruption laws and investigations, including protections for whistleblowers
7.	Develop information systems on how the safeguards are addressed and respected	III.C. 71. Requests developing country Parties aiming to undertake the activities referred to in paragraph 70 above, in the context of the provision of adequate and predictable support, including financial resources and technical and technological support to developing country Parties, in accordance with national circumstances and respective capabilities, to develop the following elements:  (c) A system for providing information on how the safeguards referred to in appendix I to this decision are being addressed and respected throughout the implementation of the activities referred to in paragraph 70 above, while respecting sovereignty;	<ul> <li>Social and environmental impact assessments at each stage of the project cycle approval, monitoring, reporting and verification procedures</li> <li>Clear institutional roles, mandates and responsibilities for multi-stakeholder and two-way information contributions</li> <li>Indicator-based data collection systems tailored to the domestic context and involving stakeholder participation, operational analysis, strategic assessment and feedback, including through publication of assessment results</li> <li>Rules and institutional mandates for auditing and reconciliation responsibilities, including verification and follow-up on discrepancies</li> </ul>
			Rules for peer reviews to assist the credibility of information
8.	Promote and support effective and transparent national forest governance structures, taking into account national legislation	Appendix I  2. When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:  (a) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;	<ul> <li>Definition of key terms (i.e. forest, deforestation, permanence, carbon)</li> <li>Clear and coherent laws and institutional mandates for forest management with national policies and devolved implementation that are commensurate to actual capacity</li> <li>Participatory procedures for decision-making on and implementation of forest management and benefit sharing</li> <li>Access to information and legal education on ownership and use rights, decision-making processes and recourse mechanisms</li> <li>Transparent rules on converting or alienating forests, including for sale, land use planning, easements and concessions</li> <li>Legislative fines, penalties and prosecutions that appropriately address deterrence</li> </ul>
9.	Address land tenure issues	III.C. 72. Also requests developing country Parties, when developing and implementing their national strategies or action plans, to address, inter alia, the drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations and the safeguards identified in paragraph 2 of appendix I to this decision, ensuring the full and effective participation of relevant stakeholders, inter alia indigenous peoples and local communities;	<ul> <li>De jure legal framework for land tenure that accurately reflects and addresses de facto occupation, management and use, including in traditional administrations</li> <li>Clear and accessible legal framework supporting and protecting attribution of entitlements for land tenure, including for customary, freehold, leasehold, concessions, leans and public ownership, use, management and transfers of interests</li> </ul>

			<ul> <li>Land titling procedures that are clear, accessible and enforceable (i.e. legal education, accessible registration, disputes resolution)</li> <li>Rules on the alienability and acquisition of lands, including free, prior and informed consent, compensation or resettlement</li> <li>Coordination of land tenure with forest governance objectives and other land use planning</li> </ul>
10.	Address gender considerations	III.C. 72. Also requests developing country Parties, when developing and implementing their national strategies or action plans, to address, inter alia, the drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations and the safeguards identified in paragraph 2 of appendix I to this decision, ensuring the full and effective participation of relevant stakeholders, inter alia indigenous peoples and local communities;	<ul> <li>Mainstreaming of gender issues into land titling and forest management procedures</li> <li>Programmes for gender sensitization, focal points, consultative fora and management teams</li> <li>Precise rules on gender equality in benefit distribution systems</li> <li>Meaningful representation of gender interests on decision-making bodies at all jurisdictional levels, including at the national policy level</li> </ul>
11.	Promote and support actions to address the risks of reversals	Appendix I  2. When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:  (f) Actions to address the risks of reversals;	<ul> <li>Action plans to deal with force majeure events (i.e. fires, extreme weather events, droughts)</li> <li>Clear and coherent hierarchies in competing interests in land across sectors that threaten permanence (i.e. easements, exceptions, expropriation, concessions)</li> <li>Rules for risk mitigation mechanisms such as title registration, insurance, bonds, liens, guarantees and buffers or carbon pools</li> <li>Risk management tools for monitoring and enforcement</li> </ul>
12.	Promote and support actions to reduce the displacement of emissions	III.C.71. Requests developing country Parties aiming to undertake the activities referred to in paragraph 70 above, in the context of the provision of adequate and predictable support, including financial resources and technical and technological support to developing country Parties, in accordance with national circumstances and respective capabilities, to develop the following elements:  (a) A robust and transparent national forest monitoring system for the monitoring and reporting of the activities referred to in paragraph 70 above, with, if appropriate, subnational monitoring and reporting as an interim measure,FN7 in accordance with national circumstances, and with the provisions contained in decision 4/CP.15, and with any further	<ul> <li>International or regional treaties on displacements (i.e. SADC Protocol)</li> <li>Subnational accords to promote coordinated actions across disparate communities</li> <li>Mainstreaming of REDD+ activities into national, regional and local land use planning</li> <li>Rules on the relationship between project-level, subnational and national baselines and crediting, including:</li> </ul>

		elaboration of those provisions agreed by the Conference of the Parties;  FN7 Including monitoring and reporting of emissions displacement at the national level, if appropriate, and reporting on how displacement of emissions is being addressed, and on the means to integrate subnational monitoring systems into a national monitoring system.  Appendix I  2. When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:  (g) Actions to reduce displacement of emissions.	<ul> <li>What activities will be counted toward national commitments</li> <li>Benefit distribution among national and subnational institutions</li> <li>How subnational/project-level participants will be compensated if displacements elsewhere reduce national crediting</li> <li>MRV and information systems that report on how displacements are being addressed</li> </ul>
13.	Promote and support multiple forest functions	Appendix I The activities referred to in paragraph 70 of this decision should: (b) Be consistent with the objective of environmental integrity and take into account the multiple functions of forests and other ecosystems; (k) Promote sustainable management of forests;  2. When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported: (e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits	<ul> <li>Integration of conservation and sustainable use of biological diversity into REDD+, and relevant sectoral or cross-sectoral policies, plans and programmes</li> <li>Rules against the conversion of natural forests into plantations, including prohibitions in benefit distribution systems</li> <li>System for simultaneous payments for carbon storage and biodiversity protection to promote integrated management and avoid investor favoritism to carbon-rich forests</li> <li>Strategic and environmental impact assessments of REDD+ projects with biodiversity criteria</li> </ul>
14.	Undertake activities consistent with national sustainable development and adaptation needs and goals, including reducing poverty while responding to climate change	Appendix I  1. The activities referred to in paragraph 70 of this decision should: (c) Be undertaken in accordance with national development priorities, objectives and circumstances and capabilities and should respect sovereignty; (d) Be consistent with Parties' national sustainable development needs and goals; (e) Be implemented in the context of sustainable development and reducing poverty, while responding to climate change; (f) Be consistent with the adaptation needs of the country;	<ul> <li>Incorporation and/or respect for commitments under national poverty reduction and development strategies (i.e. Vision 2030s, MDGs) into REDD+ strategies</li> <li>Establishment of REDD+ benefit sharing systems that provide an appropriate level and form of compensation</li> <li>Allocation of benefit distribution funds to finance socio-economic infrastructure with REDD+ co-benefits, such as ITC systems, legislative and institutional reforms, feeder roads and education</li> <li>Creation of the right cross-sectoral policy mix to address the drivers of deforestation and forest degradation without compromising livelihoods or necessary goods and services</li> </ul>

15.	Promote and support that actions complement or are consistent with relevant international conventions and agreements	Appendix I  2. When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:  (a) That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;	Incorporate and/or respect international commitments under:      Cancun Agreements and REDD+ Safeguards     UN Declaration on the Rights of Indigenous Peoples     International Convention on the Elimination of All Forms of Racial Discrimination     Convention on Biological Diversity     UN Convention to Combat Desertification     International Tropical Timber Agreement     Ramsar     International Covenant on Civil and Political Rights     International Covenant on Economic, Social and Cultural Rights     Convention on the Elimination of all Forms of Discrimination Against Women     ILO Convention No. 169     African Charter on Human and Peoples Rights     Convention on the Elimination of All Forms of Racial Discrimination     Universal Declaration of Human Rights
16.	Promote and support that actions complement or are consistent with national forest programmes	Appendix I  2. When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:  (a) That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;	<ul> <li>Incremental legal reforms to existing legislation through regulatory amendments and by-laws to supplement existing laws and lower transaction costs</li> <li>New umbrella policies and laws adequately address and incorporate existing laws, policies, guidelines, regulations and institutions</li> <li>Incorporation of prior community based or decentralized forest management programmes and/or lessons learned</li> <li>Programmes on protected areas for wildlife, biological diversity, water catchment areas and heritage conservation are respected</li> </ul>
17.	Undertake activities that are results-based	III.C. 73. Decides that the activities undertaken by Parties referred to in paragraph 70 above should 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 that could involve further capacity-building, technology development and transfer and results-based demonstration activities, and evolving into results-based actions that should be fully measured, reported and verified;	<ul> <li>Robust and equitable benefit sharing distribution systems that include results-based or performance-based payments using set milestones and/or MRV criteria</li> <li>Rules defining, supporting and protecting public or private carbon ownership and use, including alienability, transfer, royalty and fraud prevention rules</li> <li>System of performance-based penalties resulting from non-adherence to forest management rules</li> </ul>

		The activities referred to in paragraph 70 of this decision should:     (j) Be results-based;	Short-, medium- and/or long-term contracts for carbon credits that take into account periodical review and revision of reference levels to ensure additionality (i.e. dynamic baselines)
18.	Promote and support the knowledge and rights of indigenous peoples and members of local communities	Appendix I  2. When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:  (a) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples;	<ul> <li>Incorporation of traditional knowledge into forest management standards</li> <li>Rules to obtain and protect free, prior informed consent in all s.70 related activities</li> <li>Provision of legal education to local communities and indigenous peoples (i.e. on rights to tenure, carbon ownership, labour standards)</li> <li>Dispute resolution mechanisms that are equitable, transparent, accountable, independent, confidential and affordable (or free), and that respect customary justice systems of indigenous peoples and local communities</li> <li>Reinforcement of capacity of the judiciary for alternative dispute resolution, including expanding adjudicators, arbitrators or mediators to include administrative bodies and representatives of local communities</li> </ul>
19.	Promote and support the full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities in s.70 activities as well as in developing and implementing national REDD+ strategies or action plans	III.C. 72. Also requests developing country Parties, when developing and implementing their national strategies or action plans, to address, inter alia, the drivers of deforestation and forest degradation, land tenure issues, forest governance issues, gender considerations and the safeguards identified in paragraph 2 of appendix I to this decision, ensuring the full and effective participation of relevant stakeholders, inter alia indigenous peoples and local communities;  Appendix I  2. When undertaking the activities referred to in paragraph 70 of this decision, the following safeguards should be promoted and supported:  (a) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of this decision;	<ul> <li>Design of REDD+ strategies through consensus building events with local communities and indigenous peoples</li> <li>Clearly defined and enforceable rules on levels, timing and mechanisms for stakeholder participation in decision-making</li> <li>Incorporation of culturally sensitive, traditional and community structures for decision-making, including representatives chosen by themselves in accordance with their own procedures</li> <li>Broader public consultations at various levels of project design and implementation (i.e. public notice and open comment periods)</li> <li>Accessible and enforceable access to information rules for all applications, EIAs, SEAs, project documents, laws and institutional mandates affecting REDD+ activities</li> </ul>

#### Annex 2 Government of Zambia Laws Reviewed

Mexico, Diario Oficial de la Federación, Constitución política de los Estados Unidos Mexicanos, February 5, 1917 (last amendment June 20, 2011)

#### **General Laws and Regulatory Decrees**

Mexico, Diario Oficial de la Federación, Ley General del Equilibrio Ecológico y Protección al Ambiente, January 28, 1988 (last amendment January 28, 2011)

Mexico, Diario Oficial de la Federación, Ley General de Desarrollo Forestal Sustentable, 25 de febrero de 2003 (last amendment of November 24, 2008)

Mexico, Diario Oficial de la Federación, Reglamento de la Ley General de Desarrollo Forestal Sustentable, February 21, 2005

Mexico, Diario Oficial de la Federación, Ley General de Vida Silvestre, July 3, 2000 (last amendment June 7, 2011)

#### **Federal Laws**

Mexico, Diario Oficial de la Federación, Ley Agraria, February 26, 1992 (last amendment of June 22, 2011)

Mexico, Diario Oficial de la Federación, Ley de Desarrollo Rural Sustentable, December 7, 2001 (last amendment January 27, 2011)

Mexico, Diario Oficial de la Federación, Ley de Aguas Nacionales, December 1, 1992 (last amendment June 20, 2011)

Mexico, Diario Oficial de la Federación, Ley Orgánica de la Administración Pública Federal, December 29, 1976 (last amendment June 17, 2009)

Mexico, Diario Oficial de la Federación, Ley de Planeacion, January 5, 1983 (last amendment June 20, 2011)

Mexico, Diario Oficial de la Federación, Código Penal Federal, August 14, 1931 (last amendment June 8, 2011)

Mexico, Diario Oficial de la Federación, Ley Reglamentaria del Artículo 27 Constitucional en el Ramo del Petróleo, November 29, 1958 (last amendment November 28, 2008)

Mexico, Diario Oficial de la Federación, Ley del Servicio Público de Energía Eléctrica, December 22, 1975 (last amendment June 1, 2011)

Mexico, Diario Oficial de la Federación, Ley para el Aprovechamiento de Energías Renovables y el Financiamiento de la Transición Energética, November 28, 2008 (last amendment June 1, 2011)

Mexico, Diario Oficial de la Federación, Ley de Promoción y Desarrollo de los Bioenergéticos, February 1, 2008

Mexico, Diario Oficial de la Federación, Ley Minera, June 26, 1992 (last amendment June 26, 2006)

Mexico, Diario Oficial de la Federación, Reglamento de la Ley Minera, February 10, 1999

Mexico, Diario Oficial de la Federación, Ley de Amparo, Reglamentaria de los Artículos 103 y 107 de la Constitución Política de los Estados Unidos Mexicanos, January 10, 1936 (last amendment June 24, 2011)

Internal Rules of Operation of Federal Agencias and Intersecretarial Entities

Mexico, Diario Oficial de la Federación, Reglamento Interior de la Secretaría de Medio Ambiente y Recursos Naturales, January 21, 2003 (last amendment August 24, 2009)

Mexico, Diario Oficial de la Federación, Estatuto Orgánico de la Comisión Nacional Forestal, August 7, 2006.

Mexico, Diario Oficial de la Federación, Acuerdo Presidencial de Creación de la Comisión Nacional para el Conocimiento y Uso de la Biodiversidad, March 16, 1992.

Mexico, Diario Oficial de la Federación, *Modificaciones al Acuerdo Presidencial de Creación de la Comisión Nacional para el Conocimiento y Uso de la Biodiversidad,* November 11, 1994.

Mexico, Diario Oficial de la Federación, *Reglamento Interno de la Comisión Intersecretarial para el Desarrollo Rural Sustentable,* June 19, 2002.

Mexico, Diario Oficial de la Federación, *Acuerdo por el que se crea con carácter permanente la Comisión intersecretarial de cambio climático*, April 25, 2005.

#### State Laws

Aguascalientes, Periódico Oficial del Estado de Aguascalientes, Ley de Fomento para el Desarrollo Forestal Sustentable del Estado de Aguascalientes, September 11, 2006

Baja California, Periódico Oficial No. 20, Ley de Desarrollo Forestal Sustentable para el Estado de Baja California, April 30, 2010

Baja California Sur, Ley de Desarrollo Forestal Sustentable para el Estado de Baja California Sur, December 13, 2007

Campeche, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable para el Estado de Campeche, March 7, 2008

Chiapas, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable del Estado de Chiapas, October 29, 2008

Chiapas, Periódico Oficial del Estado, Ley para la Adaptación y Mitigación ante el Cambio Climático en el Estado de Chiapas, December 2010

Chihuahua, Ley de Fomento para el Desarrollo Forestal Sustentable del Estado de Chihuahua, May 22, 2004 (last amendment November 20, 2010

Coahuila, Periódico Oficial del Estado, Ley Forestal del Estado de Coahuila de Zaragoza, October 1, 2006, (last amendment June 6, 2008)

Colima, Periódico Oficial del Estado, Ley para el Desarrollo Forestal Sustentable del Estado de Colima, August 12, 2006

Durango, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable del Estado de Durango, June 13, 2004 (last amendment March 25, 2011)

Guanajuato, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable para el Estado y los Municipios de Guanajuato, March 15, 2005

Hidalgo, Periódico Oficial, Ley de Desarrollo Forestal Sustentable para el Estado de Hidalgo, August 7, 2006 (last amendment December 13, 2010)

Jalisco, Periódico Oficial del Estado de Jalisco, Ley de Desarrollo Forestal Sustentable para el Estado de Jalisco, 20 de julio de 2004 (last amendment October 20, 2007)

Michoacán, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable para el Estado de Michoacán de Ocampo, November 22, 2004 (last amendment August 23, 2007)

Nayarit, Periódico Oficial del Estado de Nayarit, Ley de Desarrollo Forestal Sustentable para el Estado de Nayarit, July 16, 2005

Quintana Roo, Periódico Oficial del Estado, Ley Forestal del Estado de Quintana Roo, December 17, 2007

Querétaro de Arteaga, Periódico Oficial del Gobierno del Estado de Querétaro, Ley Forestal Sustentable del Estado de Querétaro, July 31, 2009

San Luis Potosí, Periódico Oficial del Estado, Ley de Fomento para el Desarrollo Forestal Sustentable del Estado de San Luis Potosí, October 18, 2005

Tamaulipas, Periódico Oficial del Estado, Ley de Desarrollo Forestal Sustentable para el Estado de Tamaulipas, June 4, 2007 (last amendment June 5, 2008)

Tlaxcala, Periódico Oficial del Estado, Ley Forestal Sustentable para el Estado de Tlaxcala, August 16, 2004

Veracruz, Gaceta Oficial del Estado de Veracruz, Ley de Desarrollo Forestal Sustentable para el Estado de Veracruz de Ignacio de la Llave, July 14, 2006

Veracruz, Gaceta Oficial del Estado de Veracruz, Ley Número 878 Estatal de Mitigación y Adaptación ante los Efectos del Cambio Climático, November 3, 2010

Zacatecas, Periódico Oficial del Gobierno Constitucional del Estado Libre y Soberano de Zacatecas, Ley de Desarrollo Forestal Sustentable del Estado de Zacatecas, October 8, 2006

#### Subnational regional agreements

Gobiernos de los Estados de Yucatán, Campeche y Quintana Roo, Acuerdo General de Coordinación con el Objeto de Desarrollar un Marco de Cooperación y Coordinación Interestatal para Llevar a Cabo Acciones y Estrategias conjuntas para Abordar la Adaptación, Mitigación y Reducción de la Vulnerabilidad al Cambio Climático en la Península de Yucatán, December 7, 2010

#### Others

Secretaría de Economía, Diario Oficial de la Federación, Declaratoria de vigencia de la Norma Mexicana NMX-AA-143-SCFI-2008, Para la certificación del manejo sustentable de los bosques (que cancela la declaratoria de vigencia de la NMX-AA-143-SCFI-2008, publicada el 21 de agosto de 2008), September 8, 2008

Secretaría de Medio Ambiente y Recursos Naturales, Diario Oficial de la Federación, *Acuerdo que establece las reglas de operación para el otorgamiento de pagos del Programa de servicios ambientales hidrológicos*, October 3, 2003 and Secretaría de Medio Ambiente y Recursos Naturales, Diario Oficial de la Federación, *Acuerdo por el que se modifica el diverso que establece las Reglas de Operación para el otorgamiento de pagos del Programa de Servicios Ambientales Hidrológicos, publicado el 3 de octubre de 2003, June 18, 2004* 

Secretaría de Medio Ambiente y Recursos Naturales, Diario Oficial de la Federación, Acuerdo que establece las reglas de operación para el otorgamiento de pagos del Programa para desarrollar el Mercado de servicios ambientales por captura de carbón y los derivados de la biodiversidad y para fomentar el establecimiento y mejoramiento de sistemas agroforestales (PSA-CABSA), November 24, 2004

### Annex 3 Mexican Policies & Programs Relevant to REDD+

In the development of Mexico's National REDD+ Strategy, CONAFOR identified a series of key programs and projects of relevance for a coherent design of REDD+ nationwide. These include specific social development initiatives. Several of these programs are not directly related to the support of commercial forestry or its conservation, but are seen as necessary to take into consideration due to their transversal effects to halt deforestation and forest degradation. Several of these initiatives offer valuable lessons and innovations.

#### 1. Mexican Policies and Programs Addressing REDD+, Forests and Climate Change

- 1.1 Programa estratégico forestal para México 2025
- 1.2 ProÁrbol
  - a) Forest Plantations (PRODEPLAN)
  - b) Reforestation and restauration (PROCOREF)
  - c) Forest Development (PRODEFOR)
  - d) Payment of Environmental Services (PSA)
  - e) Prevention of Forest Fires
- 1.3 Programa de Desarrollo Forestal Comunitario (PROCYMAF)
- 1.4 Programa de Mecanismos Locales de Pago por Servicios ambientales a través de Fondos Concurrentes
- 1.5 Programa de Conservación Comunitaria de la Biodiversidad (COINBIO)
- 1.6 Programa Nacional de Áreas Naturales Protegidas
- 1.7 Programa de Conservación para el Desarrollo Sostenible (PROCODES)
- 1.8 Programa Especial de Cambio Climático
- 1.9 Estrategia de Cambio Climático para Áreas Protegidas
- 1.10Sistema de unidades de Manejo para la Conservación de la Vida Silvestre (SUMA)

#### 2. Mexican Policies and Programs Addressing REDD+, Climate Change and Human Rights

- 2.1 Proyecto de Desarrollo Sustentable para las Comunidades rurales e Indígenas del Noroeste Semiárido (PRODESNOS)
- 2.2 Programa "Hacia la igualdad de género y la sustentabilidad ambiental" 2007-2012
- 2.3 Programa de los Pueblos Indígenas y Medio Ambiente 2007-2012
- 2.4 Programa de Fomento a la Organización Social, Planeación y Desarrollo Regional Forestal

#### 3. Mexican Policies and Programs Addressing REDD+, Land Restoration and Water Resources

- 3.1 Programa Especial para la restauración de las Cuencas de los Lagos de Pátzcuaro y Zirahuén, Michoacán
- 3.2 Programa Especial para la restauración de las Microcuencas en Zonas Prioritarias del Sistema Cutzamala y de la Marquesa
- 3.3 Programa Integral de Conservación de los recursos Naturales del Sur Poniente del Distrito Federal
- 3.4 Programa Nacional Hídrico

#### 4. Mexican Policies and Programs Addressing REDD+ and Agricultural Development

- 4.1 Programa para la Adquisición de Activos Productivos Componentes: Agrícola, Ganadero, Desarrollo Rural, Acuacultura y Pesca
- 4.2 Programa de Apoyos Directos al Campo (PROCAMPO para Vivir Mejor)

- 4.3 Programa de Uso Sustentable de Recursos Naturales para la Producción Primaria; Componentes: Conservación y Uso Sustentable de Suelo y Agua (COUSSA), Recursos Biogenéticos y Biodiversidad, Reconversión Productiva, Acuacultura y Pesca, Programa Ganadero (PROGAN).
- 4.4 Programa de Soporte Componentes: Sanidades e Inocuidad, Sistema Nacional de Información para el Desarrollo Rural Sustentable (SNIDRUS), Asistencia Técnica y Capacitación, Innovación y Transferencia de Tecnología, Inspección y Vigilancia Pesquera y Acuícola.
- 4.5 Programa de Atención a Contingencias Climatológicas (PACC)
- 4.6 Tecnificación de riego
- 4.7 Proyecto Estratégico de Seguridad Alimentaria (PESA)
- 4.8 Sistema Nacional de Recursos Fitogénicos
- 4.9 Creación y conservación de bancos de germoplasma
- 4.10 Desarrollo de zonas áridas
- 4.11 Programa Especial para el Trópico Húmedo

### **Annex 4** Persons Consulted

1.	Sergio H. Graff	General Coordinator of Production and Productivity National Forestry Commission (Comisión Nacional Forestal, CONAFOR)
2.	Gisela Hernández	Legal advisor Coordination of Production and Productivity National Forestry Commission (Comisión Nacional Forestal, CONAFOR)
3.	Carlos González	Coordination of Production and Productivity National Forestry Commission (Comisión Nacional Forestal, CONAFOR)
4.	Dolores Barrientos A.	Head of UNEP Office in Mexico
5.	Katharina Siegmann	Inter American Development Bank
6.	Julia Martínez Fernández	Coordinator of Climate Change Program  National Institute of Ecology (Instituto Nacional de Ecología, INE)
7.	Blanca Lilia García López	International Relations Department Subsecretary of Prospection, Planning and Evaluation Secretary of Social Development (Secretaría de Desarrollo Social, SEDESOL)
8.	Juan Carlos Zentella Gómez	Focal point of SEDESOL (Intersecretarial Climate Change Commission) Territorial Planning Department Subsecretary of Urban Development and Territorial Planning Secretary of Social Development (Secretaría de Desarrollo Social, SEDESOL)
9.	Pedro Luis López Díaz	Interinstitutional Coordination Department Microregions Unit Subsecretary of Social and Human Development Secretary of Social Development (Secretaría de Desarrollo Social, SEDESOL)
10.	Eduardo A. Batllori Sampedro	Secretary of Urban Development and Environment Government of Yucatan
11.	Roberto Illich Vallejo Molina	Head of the Department of Evaluation Secretary of Urban Development and Environment Government of Yucatan
12.	Andrés III Sierra Gómez	Department of Geographic Information Systems and Statistics Secretary of Urban Development and Environment Government of Yucatan
13.	Ramón Alberto Reyes Viveros	Subsecretary of Environmental Management Secretary of Environment Government of Veracruz
14.	Beatriz del Valle Cárdenas	Head of the Climate Change Unit Secretary of Environment Government of Veracruz
· ·		President  Mexican Center of Environmental Law (Centro Mexicano de Derecho  Ambiental, CEMDA)
16.	Juan Carlos Carrillo	Mexican Center of Environmental Law (Centro Mexicano de Derecho Ambiental, CEMDA)

17.	Héctor Velasco Perroni	President of the Board of Directors Lawyers for the Environment College (Colegio de Abogados por el Ambiente, CAAM)
18.	Roberto Torres Velasco	Secretary of the Board of Directors Lawyers for the Environment College (Colegio de Abogados por el Ambiente, CAAM)
19.	Luis Eduardo Gómez García	Lawyers for the Environment College (Colegio de Abogados por el Ambiente, CAAM)
20.	Mariana Herrero Saldívar	Lawyers for the Environment College (Colegio de Abogados por el Ambiente, CAAM)

### **Annex 5** List of Figures

- Figure 1: Pillars and Principles of Good Governance for REDD+
- Figure 2: Legal Preparedness for REDD+ Considerations Derived from the Cancun Agreements
- Figure 3: Challenges to the Interrelationship between State and Federal Laws and Policies for REDD+
- Figure 4: Legal and Institutional Clarity and Coherence and the REDD+ Safeguards
- Figure 5: Challenges to Clear and Coherent Laws and Institutions for REDD +
- Figure 6: Regulation of Pasture Conversion and Slash & Burn Agriculture and the REDD+ Safeguards
- Figure 7: Key Challenges in Land Use in Mexico
- Figure 8: Benefit Distribution Systems and the REDD+ Safeguards
- Figure 9: Challenges to Equitable and Results-based BDS for REDD+ in Mexico

#### Annex 6 References

Alianza para la conservación de la Reserva de la biosfera Sierra Gorda, Canasta de productos y servicios ecosistémicos: Reserva de la biosfera Sierra Gorda (Mexico) available at <a href="http://www.carbonneutralplanet.org/canasta.pdf">http://www.carbonneutralplanet.org/canasta.pdf</a>

Baker & McKenzie and Covington & Burling LLP, Background Analysis of REDD Regulatory Frameworks (UN-REDD & TCG, 2009)

C. Jull et al., Recent Trends in the Law and Policy of Bioenergy Production, Promotion and Use (FAO, 2007)

CONAFOR, Coordinación General de Producción y Productividad, Servicios ambientales y cambio climático (Mexico 2010).

CONAFOR, Inventario Nacional Forestal y de Suelos 2004-2009, available at http://cnf.gob.mx/infys.

CONAFOR, *Tipos de Vegetación Forestal y de Suelos, available at* http://148.223.105.188:2222/gif/snif\_portal/index.php?option=com\_content&task=view&id=12&Itemid=7 and

Ecosystem Marketplace & Bloomberg New Energy Finance, Back to the Future: State of the Voluntary Carbon Markets 2011

FAO and Profor, Framework for Assessing and Monitoring Forest Governance (Rome, 2011)

Felicani Robles, Francesca, *Carbon Rights in REDD+: The Case of Mexico*, REDD.net, January 2011, *available at* http://redd-net.org/files/Mexico%20case%20study%20final.pdf

GEF-Administered Trust Funds, available at <a href="http://www.thegef.org/gef/trust\_funds">http://www.thegef.org/gef/trust\_funds</a>

Gobierno Federal, SEMARNAT, CONAFOR, *Visión de México sobre REDD+: Hacia una Estrategia Nacional* (CONAFOR, Mexico 2010)

ICV, Imazon and WRI, The Governance of Forests Toolkit (v.1) (September 2009)

Inter-American Commission on Human Rights, Land Tenure and Human Rights of Indigenous Peoples in Mexico, Session 141, March 28, 2011.

J. Costenbader ed., Legal Frameworks for REDD: Design and Implementation at the National Level (IUCN, 2009)

Mason Case, Sarah, Del Villar Arias, Liliana, Olawuyi, Damilola, *IDLO-CISDL Compendium of Best Practices on Climate Change Policy*, (IDLO-CISDL, Rome 2011).

Mexico – Forest Carbon Partnership, available at <a href="http://www.forestcarbonpartnership.org/fcp/node/74">http://www.forestcarbonpartnership.org/fcp/node/74</a>

Mexico, Evaluación de los Recursos Forestales Mundiales 2010: Informe Nacional México, FRA2010/132 (Rome, 2010) available at http://www.fao.org/docrep/013/al567S/al567S.pdf

Mexico, Forest Carbon Partnership Facility: Readiness Preparation Proposal, February 2010, available at <a href="http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/Mar2010/">http://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/Mar2010/</a> Mexico 120211 R-PP Template with disclaimer.pdf

Mexico, REDD Readiness Progress Fact Sheet: Country Mexico, (The Forest Carbon Partnership Facility), June 2011, available

at <a href="https://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/Jun2011/FCPF%20-%20Mexico%20Progress%20Sheet%20-%20June2011.pdf">https://www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/Jun2011/FCPF%20-%20Mexico%20Progress%20Sheet%20-%20June2011.pdf</a>

Oaxaca, ejemplo en la neutralización de emisiones de carbono en el Día mundial del medio ambiente, available at <a href="http://www.mexicoforestal.gob.mx/images/contenido/100602">http://www.mexicoforestal.gob.mx/images/contenido/100602</a> bonos carbono oaxaca.pdf.

Partnership for Market Readiness, available at http://wbcarbonfinance.org/Router.cfm?Page=PMR&FID=61218&ItemID=61218&ft=About

Patrick ten Brink, ed. *The Economics of Ecosystems and Biodiversity in National and International Policy Making* (Earthscan: London, 2011)

PROFEPA, Cero Tolerancia a la Tala Clandestina a Nivel Nacional, June 2011, available at <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia a la tala clandestina a nivel nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia a la tala clandestina a nivel nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia a la tala clandestina a nivel nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia a la tala clandestina a nivel nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia a la tala clandestina a nivel nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia a la tala clandestina a nivel nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia a la tala clandestina a nivel nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia a la tala clandestina a nivel nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia a la tala clandestina a nivel nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia a la tala clandestina a nivel nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero">http://www.profepa.gob.mx/innovaportal/v/1500/1/mx/cero</a> tolerancia nacional <a href="http://www.profepa.gob.mx/innovaportal/v/1

PROFEPA, Comités de Vigilancia Ambiental, June 2011, available at <a href="http://www.profepa.gob.mx/innovaportal/v/1555/1/mx/comites">http://www.profepa.gob.mx/innovaportal/v/1555/1/mx/comites</a> de vigilancia ambiental participativa en mat eria forestal.html

PROFEPA, Operativos Forestales Especiales, June 2011, available at <a href="http://www.profepa.gob.mx/innovaportal/v/1529/1/mx/operativos">http://www.profepa.gob.mx/innovaportal/v/1529/1/mx/operativos</a> especiales en materia forestal.html

SEMARNAT, CONAFOR, INEGI, INE, INIFAP, *Documento Estratégico Rector del Inventario Nacional Forestal y de Suelos* (Mexico, April 2004) *available at* <a href="http://148.223.105.188:2222/gif/snif\_portal/secciones/inventarionacional/documentos/DocumentoEstrategicoRector.pdf">http://148.223.105.188:2222/gif/snif\_portal/secciones/inventarionacional/documentos/DocumentoEstrategicoRector.pdf</a>

UN-REDD & Chatham House, Guidance for the Provision of Information on REDD+ Governance (Draft)

UNDP Human Development Reports, available at <a href="http://hdrstats.undp.org/en/countries/profiles/MEX.html">http://hdrstats.undp.org/en/countries/profiles/MEX.html</a>

