CARBON RIGHTS IN MEXICO

A Case Study by Francesca Felicani Robles and Leo Peskett
Key Points

• Mexico’s laws do not specify ownership of sequestered carbon. Ownership, or substantive use rights of forests, should be the first step for determining the entity most likely to have rights to carbon sequestered by forests. We might presume that forest owners and right holders will be the direct beneficiaries of carbon sequestration rights in Mexico.

• Because of the way land certification processes are regulated, it is likely that communities will have greater difficulties than the ejidos in receiving incentives from forestry programmes, such as payments for environmental services (PES).

• PES schemes already implemented through the National Forestry Commission (CONAFOR) can be considered as a reference to develop PES linked to forest carbon sequestration activities.

• Overlapping laws may make it difficult for communities to access REDD+ benefits.

• Definition of the beneficiaries and modes of payment distribution are essential before rewarding performance in reducing emissions.

• Smaller forest owners, indigenous peoples and the ejidatarios need to be provided with adequate and impartial advice about the costs and opportunities of REDD+.

• Existing forest governance mechanisms can assist in covering gaps in communication between the national, sub-national and local level, thus facilitating the understanding of forest carbon rights and their implications at the community level.

• Collective agreements could be used to reduce transaction costs in REDD+, and could build on existing institutions. However, efforts will be needed to ensure that all community members are properly represented in decision making and are able to access benefits.
In light of recent international developments underlining the key role of forest ecosystems in climate change mitigation and adaptation, national governments are increasingly adopting legislation aimed at regulating forest carbon rights.

In Mexico, a draft law on climate change is currently under discussion at Parliamentary level. The draft law would link adaptation and mitigation measures to sustainable development, taking into account the need to create a “green fund”, a national register of carbon emissions, as well as a national “carbon market”. Currently, the national legal framework does not specifically consider forest carbon rights.

Consequently, owning an intangible resource, such as actual or potentially sequestered carbon, poses some challenges to the Mexican property law system.

In Mexico, the clarification of land tenure rights will be a crucial component of forest-based approaches to combat climate change and define related carbon rights, especially as most of the forest land (70% of forest covered lands) is communal. Customary law, indigenous rights and cultural practices are also instrumental to understanding the issues related to land tenure rights and community forestry practices.

This paper analyses the current legal framework in a comprehensive way, outlining relevant aspects of ownership rights on forest lands as established by the Constitution (1917, last reformed in 2009), the Agrarian Law (1992) and the Forest Sustainable Development Law (2003). This provides insights into who is likely to hold forest carbon rights in Mexico and the remaining uncertainties in defining and allocating carbon rights. Furthermore, issues related to benefit-sharing and participation of indigenous peoples and ejidos in REDD+ programmes are addressed, highlighting the implications for indigenous peoples and forest communities in terms of potential economic benefits, risks, and liabilities.

**Forest and land tenure rights in Mexico: The key role of the communities and the ejidos**

**Forest resources**

In Mexico, the land area covered by vegetation is 139 million hectares, equivalent to 73% of the total national area. In 2009, the forest area was estimated at 65.5 million hectares. 80% of forest lands are owned by 8,928 ejidos and communities, representing between thirteen and fifteen million inhabitants.

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<tr>
<th>Box 1</th>
<th>An estimation of the forest property regime in Mexico</th>
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<td>•</td>
<td>After the 1992 agrarian reform, 70-80% of forest land is classified as social property ‘propiedad social’ owned by ejidos and communities.</td>
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<td>The major difference between an ejido and a community is that an ejido includes individual property rights for each ejidatario who have land user rights to their own parcel, whereas in a community, communal lands follow the communitarian property scheme defined by each assembly.</td>
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<td>•</td>
<td>15% of forest lands are owned by private entities.</td>
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<td>5% of forest lands belong to the Nation.</td>
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1 The ejido system is a process whereby the government promotes the use of communal land shared by the people of the community. The land is divided in communal land and “parcelled land” owned by the ejidatarios.
Most of those communities are indigenous, and as such are considered marginal groups (National Institute of Statistics, Geography and Informatics, 2007).

The Constitution of the United States of Mexico

In the mid-1980s, in response to communities’ requests, the Mexican government started reforming legislation in order to guarantee that local communities and ejidos could benefit from social and economic returns generated by land and forests. Specifically, Article 2 of the Constitution recognizes the right of indigenous communities to access and use the natural resources of their native lands.

In relation to land tenure rights, Article 27 of the Constitution states that the Nation is the owner of the land and all the natural resources of the territory. The Nation also has the right to transfer the land property to private owners, which then can only be expropriated for public utility and after compensation. Certain restrictions can be introduced in order to guarantee social benefits, the conservation of natural resources, and equitable distribution of public incomes to rural populations. Only Mexican citizens can own the land, yet under specific conditions, foreigners might be allowed to acquire property rights on land too.

The law protects the integrity of indigenous lands, recognizing that indigenous peoples are the owners of their lands. In respect of the ejidos and communities’ traditions, the law regulates community land rights, establishing mechanisms for sustainable land use. Finally, Article 27 of the Constitution also guarantees ownership rights of the ejidos and communities over their lands and regulates associative agreements related to land use between the ejidos, communities, the State, and third parties.

The Agrarian Law (1992)

According to the Constitution amended in 1992, the Agrarian Law (1992) regulates land ownership and user rights. The reform was quite controversial, allowing for the first time ever transactions and privatization of ejidal lands, if agreed by the assembly of ejidos. A direct implication of this is that a private owner could acquire land user rights from different ejidos through a 99-year lease. This would enable him/her to become the right holder of an extended land area from which they could derive related benefits from land management to sequester carbon.

The law also consolidates the status quo in relation to land distribution, banning the creation of additional ejidos or communities and the enlargement of the nucleos agrarios, thus limiting the ability of communities and ejidos to expand their areas in order to increase the incentives received for forest management.

The Agrarian Law establishes three land property regimes. Fifty percent of the land surface is considered private property and should be registered in the private property register. The remaining 50% is called social

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2 The assembly is the decision-body of the ejido composed by right holders (ejidatarios) who are members of the community.

3 A nucleo agrario is essentially a rural community that can take one of two forms: Comunidad or ejido. The nucleos agrarios represent what is known in Mexico as the social land—or the non-private land.
Carbon Rights in Mexico

property (reformada) and belongs to the ejidos (ejidal regime) and communities (communal regime). This social property should be registered in the national agrarian register.4

To implement the 1992 reform, the national land certification program, called Program for Certification of Rights to Ejido Lands (PROCEDÉ),5 was established to certify ejidatarian and communal land property rights, thus improving transparency on land tenure. This has three objectives:

1. Surveying and certifying land parcels;
2. Certifying rights to common use lands; and
3. Titling urban plots for individuals.

In relation to forests, the reform specifies that forest lands can be sold only to the ejidatarios from the same ejido, unless the assembly unanimously agrees to adopt the private property regime. Transactions of indigenous communal lands cannot take place without a decision by the assembly to adopt the regime of the ejidos. 78.4% of ejidatarian lands and only 43.8% of communal lands are certified by PROCEDÉ with uncertified lands having less clarity of land tenure rights. It is likely that lands with greater clarity of tenure will be preferred for REDD+ projects. Therefore given the current levels of certification and clarity of land tenure, communities would have greater difficulties than the ejidos in receiving incentives from forestry programs, such as payment for environmental services. It is likely that the value of uncertified lands will decrease in relation to forest lands certified by PROCEDÉ and designated for REDD+ schemes. This could eventually generate tensions between communities that do or don’t belong to REDD+ selected areas, as well as emphasize cross-boundary conflicts between neighboring communities.

Article 11 states that the assembly of the ejido might decide to adopt collective management practices, defining the mechanisms to guarantee an equitable distribution of the incomes generated by the land to the owners (ejidatarios). The assembly approves contracts and agreements related to the use of communal lands by third parties, regulates land ownership, and defines land uses and territorial delimitations (Article 23). The ejidal commission is the executive body designated to enforce the law and guarantee the ejidatarios’ rights (Article 33). The effectiveness of implementation of these procedures is likely to change in relation to local context. Women and young people, considered as avecindados

4 Edijos and communities are organized in 30,000 nucleos agrarios and 95% of those communities are indigenous people.
5 Programa de Certificación de Derechos Ejidales y Titulación de Solares.
Regarding indigenous rights, government authorities should assure land property rights for them, according to the regulation of Article 4 and Article 27 VII, par. 2 of the Constitution (Article 106). The enforcement of the Agrarian Law is undertaken by the Land Bureau, which ensures that due process is followed in the application of the law and fulfils an ombudsman role.

Agrarian conflicts are most effectively resolved by the Land Bureau when land rights are certified by PROCEDE, as this provides clarity on land tenure.

The national agrarian register provides key information on land tenure and land rights with all the transactions related to land properties, land tenure rights, sentences and cases related to communal and ejidal lands registered (Article 148). The internal regulations of the *ejidos* should also be registered (Article 10) which guarantees legal recognition of their duties, rights and responsibilities.

### The Forest Sustainable Development Law (2003)

This law implements the Constitution (Article 27) defining the competencies of the Federation, States, Federal District and municipalities in relation to forest resource management. In particular, Article 1 establishes that community and indigenous property rights on forests are regulated by Article 2 of the Constitution. Article 5 states that the property of forest resources correspond to the *ejidos*, communities, indigenous people, physical and moral entities, the Federation, States, Federal District and municipalities according to their respective land ownership.

In this regard, Article 59 of the Agrarian Law states that forest lands cannot be divided in parcels, meaning that in the *ejidos* most forest lands should be for communal uses, particularly in relation to temperate pine and oak trees. However, individuals can own small forest properties, equivalent to 800 hectares (Article 119). For example, coffee

(neighbors), are often excluded from the decision-making processes. Therefore, the risk of elite capture is present in the distribution of REDD+ incentives within ejidos.

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The role of *ejido* assemblies in decisions over benefit sharing from forest property

During the last decade, Mexican communities have increasingly invested time and resources in structuring the relationship between forest-dependent communities, their community forest enterprises (Empresas Forestales Comunitarias—EFC), and communal forest property. For example, the assembly can set up rules recognizing individual benefits coming from wood commercialization, or at the opposite end, state that all the benefits generated by wood production can be devolved to the entire community. The assembly of San Juan Nuevo Parangaricutiro for example, has assumed a balanced position, enacting individual parcel rights related to resin extraction, but allowing the establishment of EFCs if community management plans are in place. In Tamaulipas, the assembly has established parcel rights as well as community forest rights on the basis of their management plans. The assembly can also define the different uses of the communal land, for example for ecotourism purposes or livestock production. In fact, each assembly, according to Articles 24, 28 and 31, can determine the category of land uses, based on the technical norms established by the national agrarian register (Article 56). Besides, for purposes of public ejidiatarian utility, land property can be transferred to commercial companies with the participation of the *ejidos* (Article 75). The *ejidatarios* are also allowed to transfer their parcel rights to other *ejidatarios* or *avecindados* from the same community, following the requirements established by Article 80.
“REDD+ is likely to be more successfully implemented where proper federal and state legislation is applied thoroughly and without hindrance.

plantations, owned by *ejidatarios* producers or private owners, are considered as important providers of environmental services. In this regard, CONAFOR has established a program on environmental services for agroforestry systems. REDD+ could follow a similar scheme recognizing the ejidatario parcel rights certified by PROCEDE and defining the rights linked to forest carbon sequestration.

Regarding participatory processes, Article 155 establishes the creation of a consultative body, the National Forest Council (CONAF), to strengthen the participation of forest related institutions, non-governmental actors and local stakeholders in the implementation of forest policy and forest related instruments. The Regional and State Forest Councils assist the CONAF in the States, whereas the entities called *promotorías de desarrollo forestal* promote the implementation of the forest policy at the district level (Article 23).

The law establishes a national forest register (Article 51) which should be linked to the national agriculture register. All transactions related to forest land properties, uses, usufruct rights, forest services, and forest management plans should be included in it (Article 51 par. VIII). However due to overlaps between wildlife and environmental laws, communities have experienced difficulties in obtaining forest permits.

**Interpreting forest carbon rights: what are the options?**

Given the aforementioned implications of the agrarian law, forest management practices aiming to comply with REDD+ requirements must be linked to existing regulations and customary practices of the *ejidos* and agrarian communities, thus taking into account the federal legal frameworks.

As outlined in the previous section, to determine ownership rights of carbon sequestered by forests, national registers provide important data to verify the current state of forest tenure property rights, particularly if certified by PROCEDE.

However, in the absence of specific REDD+ legislation, forest carbon rights must be determined on a case by case basis, in the light of the existing norms. Presumably, the first step should be to define ownership or substantive use rights of forests, in order to identify the entities most likely entitled to own carbon rights. This is certainly the case in Mexico, where 80 % of forests are under a communal property regime. In particular, according to their internal rules, *ejidos* and agrarian communities’ assemblies are the principal decision making bodies regarding the apportionment of land and forest tenure rights. Appropriate national registers guarantee the legitimacy of these decisions.
REDD+ is likely to be more successfully implemented where proper federal and state legislation is applied thoroughly and without hindrance. In this respect, the technical rules (Normas Oficiales Mexicanas) are instrumental in defining duties and responsibilities of forest owners concerning sustainable forest management practices. To undertake forest management, forest owners or right holders need first of all to obtain permits issued by the Ministry of Environment and Natural Resources (SEMARNAT) and to elaborate forest management programs, with the assistance of CONAFOR. Therefore, the role of SEMARNAT and CONAFOR, acting as supervisors in the establishment of local sustainable forest management practices, will also be fundamental to ensure a correct level of implementation of REDD+. They will also fulfill this role if we assume that sequestering forest carbon can be considered as an ecosystem service linked to the sustainable management of forests.

In this regard, article 7 of the forest development law (2003) considers sequestered carbon as an environmental service. However, there is no specific paragraph concerning the ownership of sequestered carbon. We might therefore presume that forest owners, such as ejidatarios, communities and private owners, will be the direct beneficiaries of incentives for carbon sequestration. In this regard, article 32 underlines that forest owners or right holders should be directly involved in the multiple uses of the goods and environmental services provided by forests, including carbon sequestration.

As an example, CONAFOR is already promoting payments for hydrological environmental services provided by local communities and this offers some insights into how such a system might be applied in REDD+ (Box 2). Moreover, in July 2010, CONAFOR published the new “guidelines to promote local mechanisms for environmental services through concurrent funds” in order to encourage and strengthen the creation of local PES. These establish eligibility criteria and procedures for participation, including a “letter of intent”

**Box 3**

**The Payment for Environmental Hydrological Services Programme in Mexico**

The Mexican Programme for the Payment for Environmental Hydrological Services defines a system of payments for services, including the protection, management and restoration of watersheds, in non-commercial forestry areas. Payments are generated through a trust fund managed by CONAGUA (Water National Commission). To be eligible, forests require more than 80 per cent density and to be located in overexploited aquifers, with nearby population centres of at least 5,000 inhabitants. Each forest owner cannot register more than 200 hectares, in order to avoid the risk of monopolization of payments. Contracts provide a tree-harvesting ban in the forest surrounding the protected areas, to prevent intra-property losses. In case of intentional land-use change, the forest owner receives no payment. If deforestation occurs for other reasons (e.g., forest fire or timber theft), then the owner is paid only for the part of the forest that was preserved. Monitoring is carried out on the basis of satellite images. Between 2003 and 2005, satellite images showed that less than 0.01 percent of areas protected by the programme were deforested, in comparison with a national average deforestation rate of one percent per year. Forest fires and non-intentional land-use changes caused the majority of losses.

*Source: Karousakis (2007); Costenbader (2009)*
to CONAFOR identifying the parties that are interested and describing the area that will benefit from the incentives derived from the environmental services. Similar procedures may be expected in a future REDD+ system. In 2009, thirteen agreements had been signed for a total amount of more than 87 million pesos, corresponding to 45 million pesos coming from CONAFOR and 44 million from counterparts (national institutions, private companies, civil society, physical and moral entities). Local PES will be established over an area of more than 90,000 hectares and involving 326 beneficiaries (ejidos, communities and small owners). Seventeen agreements are currently in force, covering the period 2008-2009.

In relation to REDD+, the most relevant PES scheme is the ‘ProÁrbol’ program, now implemented in an area of 2.2 million hectares (an increase from 146,000 hectares in 2006). ProÁrbol is the major federal forest program aiming to support local forest owners and right holders in carrying out activities of forest protection, conservation, restoration, and sustainable forest management practices. The objective in 2011 is to reach 2.6 million hectares. To that end the SEMARNAT expects to integrate the funds of REDD+, negotiated during COP16 in Cancun, into the ‘Proárbol’ scheme. According to the Forest Sustainable Development Law (2003), CONAFOR is responsible to implement in a transparent and efficient way the PES forestry programs. The operational rules of ‘Proárbol’ 2010 define the category of beneficiaries, the payment mechanisms, monitoring and verification systems, sanctions for non compliance, and the procedural aspects for the submission of the applications. Special safeguards are guaranteed to ejidos and communities through a set of criteria establishing the order of priority.

**How could agreements between buyers and sellers be regulated?**

Private contracts and covenants are the principal instruments to regulate the interests of different parties. To stipulate a contract, the federal civil code requires an agreement between the contracting parties and the definition of the object. Contracts could be stipulated between local land owners and buyers of carbon sequestration rights, and CONAFOR as guarantor for third parties dealing with local communities.

To reduce transaction costs, potential buyers of carbon rights would presumably be encouraged to invest in projects covering an extended forest area, implying cooperation agreements among local land owners. In this case, a contract of sale, as it is defined by the Civil Code, could be used to define rights and duties of the contracting parties. In this regard, the civil code states that the object of the contract must “exist in nature”, therefore the object must be determined and able to be commercialized. Carbon dioxide exists in the atmosphere and it can be quantified, while the intention of the parties to conclude the agreement is expressed by the contract itself. Private contracts have the advantage that any
A stakeholder can take part in the agreement, even if they cannot solve the challenge of establishing the necessary methodologies to adequately measure the stock of carbon sequestered (CEMDA, 2010).

Another solution would be to regulate and harmonize those aspects through the elaboration of specific norms according to Article 55 of the Forest Sustainable Development Law (2003). Particularly, SEMARNAT can define the conceptual framework for certain aspects of forest carbon rights, adopting a set of technical norms (normas mexicanas en material forestal), aiming to characterise what forest carbon rights should encompass under a workable forest carbon regime. Those technical norms might also define what the rights, duties, and responsibilities of the parties are in terms of risks and liability in relation to carbon sales.

This second option could be considered as the regulatory framework in relation to contracts dealing with carbon rights. Those technical norms could define the duties and responsibilities of the parties while containing safeguard provisions aiming to balance benefits between local communities, outside investors, and CONAFOR while incorporating guarantees that carbon will be stored for the specified contract period.

Finally, according to the ‘Proárbol’ technical rules, an agreement ‘convenio de adhesión’ should be subscribed between regional and subregional entities acting for CONAFOR and the beneficiaries of ‘Proárbol’ subsidies that are: a) individuals (Mexican citizens), b) ejidos and communities, or c) associations/private companies—to comply with activities of reforestation, and forest protection, conservation, plantation, and payments for environmental services. Different annexes should be included, being part of the agreement, in relation to each activity financed by CONAFOR. This scheme might be a valuable option for REDD+ programs, while taking into account the need to specify the criteria of eligibility and norms defining the nature and ownership of carbon rights.

How can the rights of communities and indigenous peoples be protected under REDD+ schemes?

The overall trend is that community forestry in Mexico has been successful to develop multifunctional uses of forests at the local level, including carbon sequestration (Kaimowitz, 2004). However, the analysis has highlighted a number of legal issues which will need to be carefully considered in implementing REDD+ in a way which protects the rights of communities and indigenous peoples in Mexico:

**Safeguarding communal land management practices**

Unclear land tenure rights may be the major risk affecting indigenous peoples’ and communities’ participation in REDD+ programs, despite the fact that some of the greatest opportunities for sequestering forest carbon may occur on their lands. Therefore, safeguarding communal land management practices will be pivotal to effectively implement REDD+ programs.

Certified rights under the PROCEDE program will certainly facilitate land users to benefit

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Reducing overlaps between laws

One of the main impediments to sound forest management practices is the overlap of laws and regulations mentioned earlier. This contributes to the generation of local conflicts, for example surrounding the allocation of forest management permits, and it also limits the access to benefits coming from forests. This existing lack of clarity highlights how important it will be that the formulation of carbon trading rules is extremely clear and simple.

Standardized measures such as standardized carbon emissions reference levels should also be developed and implemented where possible, in order to simplify rule making (UN-REDD Programme, 2008).

Ensuring the clarity of benefit sharing in laws and legal processes

Clarity in national laws and sub-national programs to implement benefit sharing principles are paramount in defining and allocating benefits among the ejidos and local communities, thus facilitating the permanence of carbon emissions reductions and attracting long-term investments in the country.

Legislation on REDD+ should incorporate clear and harmonized legal procedures and rules, allowing for open participation among actors at sub-national and national levels, in order to ensure the successful and equitable distribution of REDD+ benefits. Cross-sectoral initiatives, such as the working group created in December 2009 focused on reducing emissions from deforestation and degradation and increasing carbon forest stocks linked to sustainable management (GT-REDD+), are certainly very important instruments to harmonize, develop and successfully implement national public policies related to REDD+.9

According to those principles, the operational rules of ‘Proárbol’ ensure an equitable and non-discriminatory access for women and indigenous people to CONAFOR’s subsidies (article 32). Presumably, similar provisions could be considered to implement REDD+ schemes.

8 The Land Bureau revealed the existence of 1248 agrarian conflicts in 2007.

9 The general direction on climate change policies of the Minister of Environment and Natural Resources (SEMARNAT) and the International Affairs Unit of CONAFOR are the leaders of the group.
Increasing awareness of the costs and opportunities related to REDD+
Smaller forest owners, indigenous peoples and the ejidatarios should have adequate awareness about the costs and opportunities related to REDD+ programs. Legal provisions should clarify the mechanisms of such procedures as well as how community land rights and responsibilities are affected, using the existing PES schemes. In this regard, prior informed consent should be provided, particularly to local and indigenous communities.10 Capacities should be developed at the local level to facilitate the understanding of the forest legal framework, thus enabling local users to overcome the lack of clarity of the legal framework.

CONAFOR already plays a key role in assuring transparency of transactions in implementing local environmental services programs related to carbon sequestration. Such intermediaries could also play an important role in ensuring that the costs and opportunities of REDD+ are properly understood by communities at the local level.

Reducing transaction costs through collective agreements
In order to reduce transaction costs and include communities and ejidatarios’ participation, collective agreements can be used to negotiate carbon contracts with community land owners through the intermediary of CONAFOR. In fact, there are unions of ejidos that have the juridical status to act for their communities in receiving payments from CONAFOR for the environmental services provided by communities. A pragmatic solution could be that those existing entities act as parties in the contracts while representing the entire community.

However, the low participation of young generations in ejidatarios’ assemblies and their weak involvement in the decision-making processes could bring into question the effectiveness of using existing local structures to implement REDD+ and enhance equity. Efforts will need to be made to facilitate the involvement of younger generations in these processes.

To facilitate the ejidal commissions implementing land users’ rights, groups of technicians called promotores from the national forest commission (CONAFOR), could help formulate the related management plans and provide clarifications related to their implementation.

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Legislation


