



TFD STEERING COMMITTEE 2010

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THE FORESTS DIALOGUE

Field Dialogue on REDD Readiness in Ecuador 15-18 June 2010 | Papallacta, Ecuador *Background Paper*

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INTRODUCTION

This paper offers basic information regarding the framework required to develop and implement activities for Reducing Emissions from Deforestation and forest Degradation (REDD) in Ecuador. It was prepared as a guideline for the participants in the “Fourth REDD Readiness Dialogue”, to be held on June 15 to 18 in the provinces of Orellana and Napo, Ecuador, as part of the dialogues promoted by The Forest Dialogue (*El Diálogo Forestal*). Most of the data was gathered from secondary sources, while those relating to the process of preparing to implement REDD activities were generated and facilitated by the Ecuadorian Ministry of the Environment, which is responsible for that process in this country.

1. BACKGROUND INFORMATION

1.1 Location, Population and Biological/Economic Information

Ecuador is a country located in the Northeastern part of South America. It borders with Colombia to the North, with Peru to the South and East, and with the Pacific Ocean to the West. The capital city is Quito, seat of the main state entities and the Central Government. The largest city is Guayaquil, a major seaport and economic center. Ecuador is subdivided into 24 provinces, which are distributed among four natural regions: Amazon, Coast, Andes, and Insular. The total area of the country is 256,370 Km² (INEC, 2010).

The Instituto Nacional de Estadísticas y Censos (INEC) reports that by May 2010, Ecuador's population reached 14,285,288 inhabitants, with a yearly growth rate of 1.5% to 2%. The population is centered primarily in the Coastal and Andean regions (nearly 95%), which make up approximately 50% of the national territory. About 66% of the population lives in urban areas (INEC, 2010).

In 2009, the gross domestic product (GDP) was around 51.386 million Dollars US. Since 2006, the GDP for the non-oil sector (US\$ 16,417 million) has experienced continual growth, having reached US\$ 18,592 million in 2009. During the period from May 2009 to April 2010, total monthly exports rose from US\$ 1,112 million to US\$ 1,481 million. During that same period, total monthly imports went from US\$ 1,196 to US\$ 1,568 million (INEC, 2010).

The economy is characterized by raw material production. The main export product is oil, extracted from the Amazon region. Ecuador is one of the primary banana exporters in the world and one of the mayor exporters of flowers, shrimp and cacao. As for jobs, by March INEC recorded under-employment at 51.3% of the Economically Active Population (EAP) and unemployment at 9.1%.

Ecuador is one of the 10 most bio-diverse countries (FAO, 2009). According to Sierra (1999), it has an estimated 20,000+ species of vascular plants and some 3,500 species of vertebrates, not including marine fish. Many are endemic and on the endangered list. Some 50% of its territory is in the Amazon basin, which is the largest tropical jungle in the world and an enormous reserve of the planet's terrestrial biodiversity.

1.2 Tree Cover, Forest Use and Deforestation Rates

Even considering that the land-use change is an on-going process, there is no updated information on forest cover. Various estimates based on secondary information indicate that around 50% of Ecuador's land area is covered with forests, which is some 12 million hectares (Sierra *et al.* 1999; STCP, 2006). The Ministry of the Environment is currently in the process of gathering information for the national forest inventory, which will provide up-dated data on existing forests.

The Amazon region makes up 50% of Ecuador's surface area, with a human population of 619,788 (INEC, 2010). Eight percent of this is allocated to farm use. The Andean and Coastal regions cover approximately 25% of the country each. About 48% of the land is used for farming in the Andes, and some 61% on the Coast. Pastures are the predominant use of farmlands (83% in the Amazon, 64% in the Andes and 58% on the Coast).

In 2003, the *Centro de Levantamientos Integrados de Recursos Naturales por Sensores Remotos* (CLIRSEN) prepared a forestry map of the country (see annexed map). Table 1 details the cover types and surface area of each, both inside and outside of the protected areas, as per that map (Sanchez, 2006).

Plant Cover Type	Natural Vegetation (ha)	Natural Vegetation outside of Protected Areas (ha)
Moist Forest	10,489,756	7,881,758
Dry Forest	569,657	562,183
Shrub land	1,360,176	1,202,108
Mangroves	150,002	108,299
Moretals	470,407	173,475
Paramo Vegetation	1,244,831	842,736
National Protected Areas		3,984,056

Table 1: Plant Cover Types and Surface Areas in Hectares. Source: Sanchez, 2006.

In Ecuador, as in other tropical countries, forests face many pressures of various intensities. CLIRSEN data for different forest types show an average of 1.47% per annum during the 1991 – 2000 period. The provinces having the most severe plant-cover loss – in absolute terms – were those of the Amazon and Esmeraldas (Northern Coast). See Table 2.

Forest Type	1991 (ha)	2000 (ha)	Deforestation 1991-2000 (ha)	Rate of Deforestation per Annum (%)
Moist Forest	12,114,299	10,489,756	1,624,543	1.49
Dry Forest	708,768	569,657	139,111	2.18
Mangroves	162,197	150,002	12,195	0.84
Moretals	477,390	470,407	6,983	0.16
Total	13,462,654	11,679,822	1,782,832	1.47

Table 2: Deforestation rate in continental Ecuador by forest type. Source: CLIRSEN, 2003 (quoted by Sanchez, 2006a).

Data from the FAO Statistical System (FAOSTAT¹) gives reason to believe that deforestation is ongoing. According to Table 3, between 1990 and 2007 there was a persistent loss of forest cover, while the extension of farmland remained relatively stable, but not its location. Areas with other uses (abandoned land, urban lands and other types of forest formations) increased.

Land Use	1990 (ha)	2000 (ha)	2007 (ha)
Farmland	7,846,000	8,066,000	7,412,000
Forested land	13,817,000	11,841,000	10,458,000
Other uses ²	6,021,000	7,777,000	9,813,000
Total	27,684,000	27,684,000	27,683,000

Table 3: Land Uses during 1990 – 2007 period. Source: FAOSTAT^{fn}.

According to Ecuador's First National Communication to the United Nations Framework Convention on Climate Change (2000), approximately 45 million tons of CO₂ emissions were generated by the forest sector in 1990. This represented 69% of all CO₂ emissions in 1990.

Ecuador is now working on the Second National Communication. The preliminary results are presently being validated by state institutions.

1.3 Contribution of Forestry to the Domestic Economy

In macroeconomic terms, Lascano (2008) states that the forestry industry's contribution to the domestic economy, despite having grown by 48% between 1997 and 2006, has remained stable in relation to other sectors, positioned at an average of around 2.3% of the real GDP. Nevertheless, this percentage does not reflect this industry's real contribution to the economy, because in the System of National Accounts (SNA) methodology, the forestry industry includes the following items: (i) forestry and timber extraction,

¹ FAO, FAOSTAT. Internet: <http://faostat.fao.org/site/626/default.aspx#ancor> Acceso: Junio 2, 2010

² Other uses: abandoned land, urban lands, and other types of forest formations.

(ii) lumber production and manufacture of wood products. This means that other contributions originating in the forestry sector are included under other industries (tourism, agriculture or manufacture) or are not quantified or valued (water sources, carbon sequestering).

This study implies that traditional methods for quantifying the different industries' contributions to the GDP tend to underestimate inputs from natural ecosystems to the overall economic system. This is demonstrated by the fact that the SNA does not include an assessment of environmental services provided by forests. Such underestimation could be deemed an underlying cause for natural resource degradation in general and deforestation in particular.

Wood-chain studies in pilot sites with dense native forest areas suggest that the economic benefit of exploiting woodlands is relatively low for small farm owners, both indigenous and settlers. In many cases, their participation is limited to selling standing timber (for prices ranging from US\$ 20 to US\$ 30 per 3.5–6.5 m³) to intermediaries and/or dealers who benefit the most. When subtracting from these prices the high cost of legalizing the stand, at about US\$ 4.60 per m³, this leaves a very narrow profit margin for farm owners and rewards illegal exploitation. The conclusion is that the wood chain is usually characterized by a lack of information available to stakeholders, which limits transparency and hinders legality (Gatter & Romero, 2005; Hetsch, 2004).

1.4 Landholding, Main Forest Owners and Conflicts

Land can be held individually or collectively in Ecuador. According to Palacios (2005), indigenous peoples own and/or hold more than 7 million hectares. This does not include all indigenous territories, due to difficulties in obtaining actual data. In many cases, these lands have been delimited as part of the *Patrimonio Forestal del Estado* (PFE) or the *Sistema Nacional de Areas Protegidas* (SNAP). An estimated 65% of Ecuador's native forests are in the hands of ancestral peoples and indigenous communities (Palacios, 2005).

According to FAO (2005), of Ecuador's entire wooded area, a little more than 9 million hectares are owned by the State (national government, sectional governments, and governmental agencies), divided up as follows: i) SNAP has 18% of the land, about 4.7 million hectares; ii) *Bosques Protectores Públicos* has 9%, around 2.3 million hectares; and iii) PFE has 8% of the land, some 2 million hectares. According to Morales (2005), approximately 50% of all State-owned areas have land-use and land-holding conflicts.

The uncertainty associated with holding forestlands is one of the major weaknesses of the sector. Delimitation of the PFE (in the early eighties) and the SNAP was only on paper, so there is major overlapping among the different management categories of State land and that owned by ancestral peoples, indigenous nationalities, *campesino* communities, and settlers.

A series of conflicts relating to land ownership has been identified within the SNAP, and the following causes were given: i) the existence of land with legal title deeds obtained before the protected area was established (there are no provisions for dealing with such situations); ii) ancestral holdings that cannot

be legalized; iii) prior landholdings that have not been legalized; and iv) re-delimitation of protected areas. In the PFE, conflicts have arisen regarding: i) the presence of settlers / land-grabbers and the lack of boundaries between said settlers and ancestral landowners; and ii) the PFE's conversion to ancestral communal properties, without this meaning that the awarded land is removed from the PFE (Franccescutti, 2002).

The *Ministerio del Ambiente del Ecuador* (MAE) and the *Instituto de Desarrollo Agrario* (INDA) have the power to normalize landholding. This power was granted by the *Ley de Desarrollo Agrario* (Codification 2004-02 published in the supplement to Official Gazette N° 315 of April 16, 2004). The INDA can provide title deeds to owners of land suited for agriculture or livestock, which has been held for over 5 years. Note that by 1998, approximately 7.9 million hectares (29% of the country) had been awarded.

According to INDA,³ 65,100 hectares were awarded in 2006. It should be noted that in May 2010, INDA was eliminated by Executive Decree and its powers and duties were transferred to the *Ministerio de Agricultura, Ganadería, Acuacultura y Pesca* (MAGAP). INDA is currently being restructured, pursuant to Executive Decree No. 373 of May 28, 2010.

In general terms, there are issues with the process of legalizing land ownership. Many rural cantons, for example, do not have a cadastre or have difficulties managing it correctly. The land granting process is long and costly, and often lacks the right technical instruments.

1.5 State Regulations to Reduce Deforestation and Forest Degradation

Ley Forestal y de Conservación de Áreas Naturales y Vida Silvestre. Passed in 1982, it lays out the general guidelines for a forest and protected areas policy. Articles 66 and 67 entrust the MAE to determine and delimit the lands making up the *Patrimonio de Áreas Naturales del Estado* (PANE – State heritage of natural areas). This is a collection of natural areas that “*stand out because of their protective, scientific, scenic, educational, touristic, and recreational value, because of their flora and fauna, or because they are ecosystems that help to maintain environmental balance.*” For administrative purposes, the law categorizes these areas as follows: a) National parks; b) Ecological reserves; c) Wildlife refuges; d) Biological reserves; e) National recreation areas; f) Fauna production reserves; and g) Hunting and fishing areas, collectively known as the SNAP. In addition, the law establishes parameters for flora and fauna conservation. The last codification of this law was done in 2004. In addition, the 2008 Constitution includes decentralized governmental, community and privately-owned protected area sub-systems which, together with the PANE sub-system, make up Ecuador's *Sistema Nacional de Áreas Protegidas* (Art. 405).

3 INDA. Internet: <http://www.inda.gov.ec/transparencia/estadisticas.html>. Access: June 2, 2010.

Ley de Gestión Ambiental: With the issuance of the Environmental Management Law, all those who cut down, transform, purchase, transport, trade, or utilize forests without authorization shall be obliged to pay a fine that is equal to the cost of restoring the deforested or destroyed area. It declares native ecosystems as highly vulnerable, and establishes guidelines for restoring them.

Unified Text of the Secondary Environmental Legislation (TULAS from the Spanish): TULAS Book III, issued via Executive Decree No. 3399 published in Official Gazette N° 725 of 12/16/02, includes the following basic criteria for sustainable forest management relating to the development and execution of integrated management plans and programs to exploit native forests:

- 1.1.1. Sustainability of Production: The use rate of timber products shall not surpass the natural replacement rate for said products in the forest.
- 1.1.2. Maintaining the Forest Cover: Areas with native forests shall be kept under forest use.
- 1.1.3. Biodiversity Conservation: Flora and fauna species shall be preserved, as well as the features of their habitats and ecosystems.
- 1.1.4. Co-responsibility for Management: Sustainable forest management shall be implemented with the involvement and control of those holding title over forests. Those implementing the integrated management plan and forest use programs shall have shared responsibility.
- 1.1.5. Mitigating Negative Environmental and Social Impacts: Sustainable forest management shall mitigate damages to natural resources and foster local community development.

Sustainable Forest Development Strategy. It was issued by the MAE in 1999 and up-dated in 2005. It highlights the topics of transparency and joint actions involving the civil society and private sector. Table 5 summarizes some of the strategy goals that are of special importance to the REDD.

Goals	Actions	Strategies
Stop the process of natural forest loss	Implementing instruments aimed at promoting sustainable management and at placing a value on their services and products (timber, non-timber and others), thereby enhancing their ability to compete with other land uses.	Assessing native forests and planted stands
To conserve and manage forests	Generate alternative uses, including their tourism potential, the sustainable use of biodiversity, and others. Take into account the existing forests in the natural protected areas and in certain special areas.	Developing and funding sustainable forest management
To recover lands that are suited to forestry	Build them into socioeconomic development processes by promoting afforestation. Take into account lands lacking forests and/or with degraded soils.	Strengthening civil society involvement and management
Social participation	Ensure the involvement of rural dwellers, indigenous nationalities and negro populations in planning, implementing and monitoring forestry and conservation programs.	Institutional and organizational modernization Updating the legal framework

Table 5: Summary of the goals, actions and approaches of the Strategy for Sustainable Forest Development relating to REDD.

SNAP Strategic Plan (2007 – 2016). It sets various goals, including: i) To consolidate the SNAP; ii) To contribute to effective SNAP management with capacity building for the Designated National Authority and those responsible for sub-system management and use; iii) To promote integrated management through stakeholder involvement; iv) To promote the development of a favorable legal, institutional and financial framework; v) To achieve long-term financial sustainability and implement sub-system funding mechanisms; vi) To provide information for administrative decision making; vii) To enhance PANE governance by managing conflicts over land ownership.

Sistema Nacional de Administración y Control Forestal. This is operated by the MAE's *Dirección Nacional Forestal* and is in charge of the following activities:

- Approving plans and programs
- Computer control of transport permits
- Follow-up of forest administration processes
- Inputting data provided by forest managers and inspectors
- Developing and providing forest data obtained from the above processes.

Forest stewardship is performed in support of this system. A forest steward is a professional who is accredited by the MAE and has public responsibilities such as overseeing the legality of land developments, ensuring that management plans are developed correctly and that land development operations follow established standards and permits.

Other Regulations for Sustainable Forest Management. The MAE has issued specific regulations for managing moist forests, Andean forests and dry forests. The following regulations have been passed especially for native forests: i) exploitation with mechanized extraction: Management Plan and *Programa de Aprovechamiento Forestal Sustentable* (PAFSu); ii) exploitation using skidding without machines: *Planes de Aprovechamiento Forestal Simplificados* (PAFSi); and iii) land conversion to crops or pastures for subsistence purposes: Management Plan and *Programa de Corta para Zona de Conversión Legal*. For pioneer formations, relict trees, regenerating tree crops, planted trees, and forest plantations, the Cutting Schedule (*Programa de Corte*) is the required instrument. All harvest permits are issued on the basis of those regulations. Part of this procedure includes paying a so-called “Piedmont Tax” of US\$ 3.00 /m³ for all harvested timber. The MAE can set fines for those acting outside of the established regulations.

1.7 The New Forest Governance Model

The MAE, as the National Forest Authority, is developing a new forest governance model in an effort to manage the country's forest resources in a sustainable fashion. One of the purposes for this model is to reduce Ecuador's deforestation rate, thereby meeting one of the objectives of the *Plan Nacional para el Buen Vivir*.

Ensuring the sustainable use of forest resources requires attention to the three pillars of sustainable development: environmental, social and economic. The environmental part ensures the environmental integrity of forest ecosystems, the social aspect guarantees the wellbeing of those who depend on the

forests and enhances their quality of life, and the economic element seeks long-term economic development.

Achieving sustainable forest resource use requires intervening from various angles: conservation, afforestation, reforestation, and sustainable forest management. Therefore, the MAE decided to formulate a forest governance model with five components: incentive system, control system, afforestation/reforestation, sustainable forest management, and forest information system. Figure 1 shows a preliminary outline of the Forest Governance Model.

Figure 1: Preliminary Arrangement of the Forest Governance Model



		Incentive System		
Forestry Information System				Control Systems
		Sustainable Forest Resource Management in Ecuador		
	Sustainable Forest Management		Afforestation and Reforestation	

Several specific activities were identified for each of the Forest Governance Model components, some of which are already under way. For example, on-going projects under the “Forest Information System” component include the National Forest Assessment, to characterize the country’s forest resources, and the Deforestation Baseline to determine Ecuador’s current rate of deforestation. The Forest Statistics Program is also collecting timber demand data and following up on forest use plans, reforestation activities, and others.

In addition, the MAE is working to develop a new forest law (“*Ley de Bosques*”), and both the forest regulations and the Strategy for Sustainable Forest Development are under study.

2. Programa Socio Bosque: An Initiative to Fight Deforestation

Aware of the country's high deforestation rates, the MAE has been implementing the *Programa Socio Bosque* (PSB) since September 2008, within the context of the new forest governance model. PSB's purpose is to conserve native forests and other remnants of native vegetation in Ecuador by implementing an incentives policy. This is being used as a supplementary alternative to traditional forest control measures.

Program Goals:

1. To conserve native forests and other native ecosystems, thereby protecting its enormous ecological, economic, cultural, and spiritual assets. The target is to conserve 4 million hectares of forests and other native ecosystems within the next 7 years.
2. To significantly reduce deforestation and associated greenhouse gas emissions; and
3. To enhance the living conditions for *campesinos*, indigenous communities and other rural inhabitants in the country. It is expected to benefit 500,000 to 1 million persons.

How does the Program Work?

The Program consists of providing a direct monetary incentive per conserved hectare per year. The incentive can be up to US\$ 30 per hectare and varies according to the surface area that an owner voluntarily wishes to include in the Program. Delivery of the incentive is conditioned on the protection and conservation of their forests, which means that they receive the incentive once they fulfill all follow-up conditions contained in an agreement signed with the MAE for a 20-year period.

All individuals, legally-established communes and indigenous peoples or nationalities that have the appropriate title deeds to the land may participate in the Program. However, areas meeting the following criteria pursuant to the geographic prioritization plan will be given precedence to join: areas with a significant threat of deforestation, areas of importance for creating and preserving environmental services, and areas with high levels of poverty.

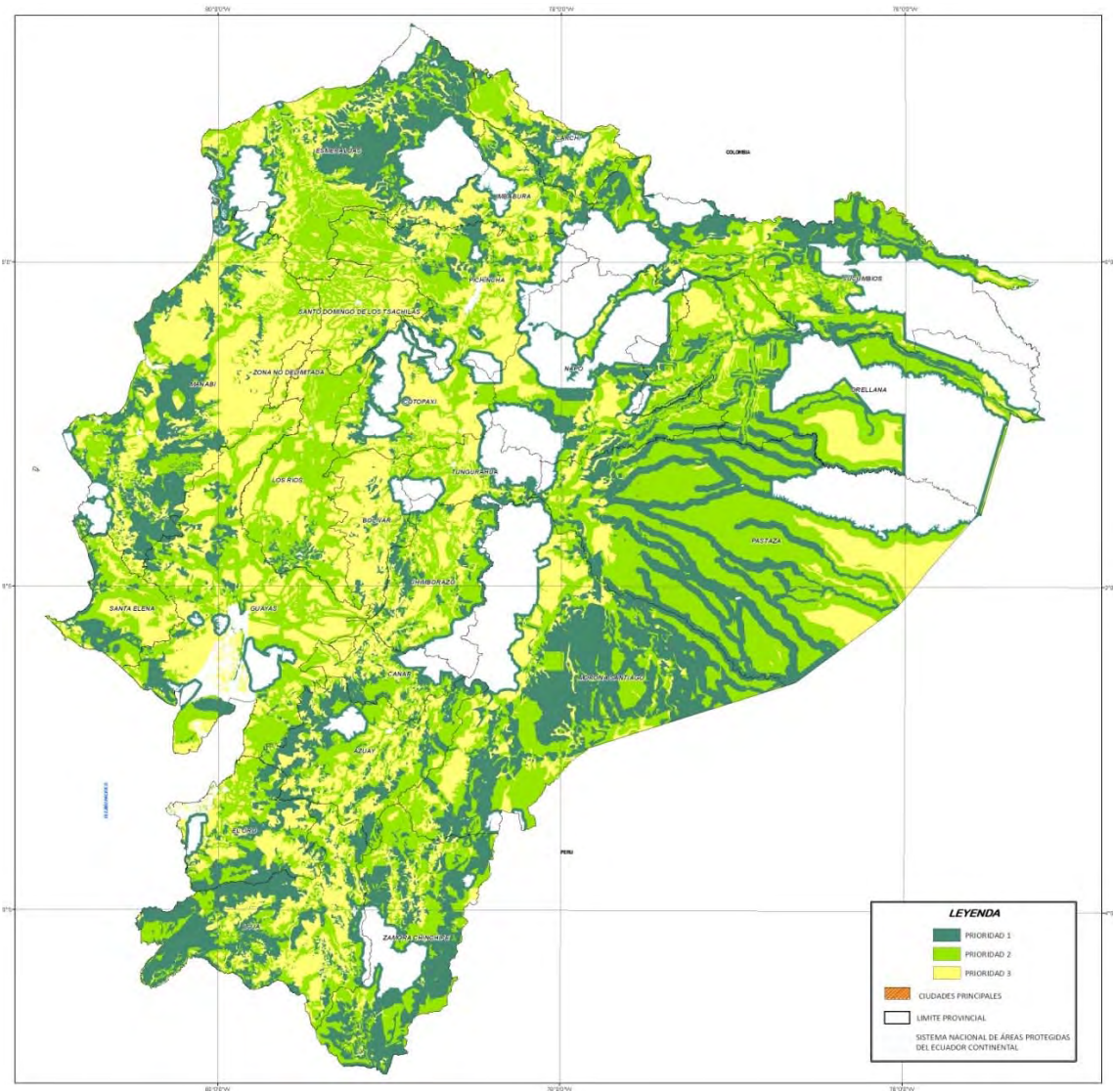
In addition, as one of the requirements for entering the Program, beneficiaries should present an "Investment Plan" telling the PSB how they will use the funds received in exchange for forest conservation.

Program Outcomes at May 2010

From September 2008 to December 2009, 413 conservation agreements were signed with private owners and indigenous communities, thereby conserving 416,509 hectares of native forests, *paramos* or other native vegetation throughout the country and benefiting 40,273 persons. Of the total area under conservation, 86.8% are tropical rain forests, while the remaining 13.2% is divided among montane forests, dry forests and *paramos*.

The target for 2010 is to sign new conservation agreements for 200,000 additional hectares, benefiting another 18,000 persons. By May, new agreements had been signed for approximately 100,000 additional hectares, benefiting around 9,000 persons.

Map 1: Geographic Prioritization Model – Programa Socio Bosque

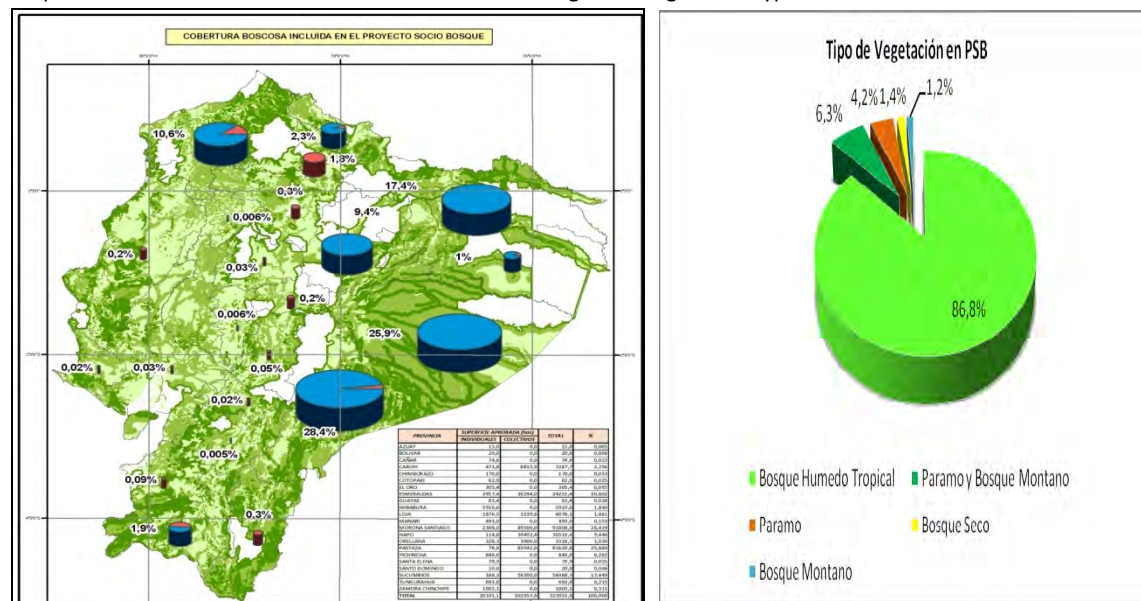


	Legend: Priority 1, 2, 3
Major cities	
Provincial borders	
National Protected Area System for Continental Ecuador	

Currently, the PSB is financed solely through fiscal funds from the general State budget. However, additional resources are expected to be required to reach financial sustainability for the Program. These funds can come from international cooperation, whether bilateral, multilateral or from the private sector, or by implementing a REDD+ mechanism. Therefore, the MAE is working on fundraising and preparing to implement the REDD+ mechanism in Ecuador.

Map 2: PSB Outcomes at December 2009

Figure 2: Vegetation Types in PSB



FOREST COVER INCLUDED IN PROJECT SOCIO-BOSQUE (PSB)			Vegetation Types in PSB	
			Tropical rain forest	Paramo and Montane Forest
			Paramo	Dry Forest
			Montane Forest	

3. Legal and Institutional Framework for REDD+

Over the past years, Ecuador has developed a series of legal provisions and national policies aimed to create favorable conditions for sustained reduction of deforestation. These legal provision form a solid policy platform for defining its “*Estrategia Nacional REDD*” (EN REDD), and include:

Constitution of the Republic: The new Constitution (approved in 2008) recognizes the rights of nature and admits the demandability of those rights. It includes specific mandates to protect biodiversity, mitigate climate change, and regulate environmental services.

With regard to the REDD mechanism, various provisions stand out, such as “The Central State maintains exclusive jurisdiction over forest resources” (Art. 261). In addition, it prohibits forest exploitation in protected areas and intangible zones (Art. 407). On the other hand, it establishes that biodiversity is a strategic sector that the State reserves the right to administer, regulate, control and manage in conformity with the principles of environmental sustainability, precaution, prevention, and efficiency (Art. 313).

Probably the most important constitutional prescriptions for REDD are Art. 414, which establishes that *“The State shall take adequate cross-cutting measures for climate change mitigation, such as limiting greenhouse gas emissions, deforestation and air pollution, shall take measures to conserve forests and other vegetation, and shall protect populations at risk”*; and the sub-section of Art. 74 that states that *“environmental services shall not be subject to appropriation, but rather their production, provision, use, and exploitation shall be regulated by the State.”* (Constitution of Ecuador, 2008).

Plan Nacional para el Buen Vivir 2009-2013: This instrument is the guiding principle of the national policy for a “good life”, or “Sumak Kausay” from the Quichua. Of the 12 national goals, goal 4 states “to guarantee the rights of nature and promote a healthy, sustainable environment.” In order to meet this goal, it establishes –among others– policy 4.1 that says “To conserve and sustainably manage natural heritage and its biological diversity, both terrestrial and aquatic, which is considered a strategic sector.” Important objectives for goal 4, include 4.1.1, “To enlarge the area under environmental conservation or management by 5 percentile points by 2013,” and objective 4.1.3, “To reduce the deforestation rate by 30% by 2013.”

Ecuadorian Environmental Policy: The new environmental policies for Ecuador that were approved and published in 2009 and that govern the country’s new environmental management, include Policy 3 that refers to *“promoting adaptation to climate change in order to reduce social, economic and environmental vulnerability.”* The first strategy for that policy refers to “mitigating the impacts of climate change and other natural and anthropogenic events on people and ecosystems.” Meanwhile, the third strategy relates to “reducing greenhouse gas emissions by the productive and social sectors.”

Private Initiatives for Conservation, Reforestation and Sustainable Forest Management

In Ecuador various initiatives promote conservation and sustainable forest management through programs and mechanisms of compensation and payment for environmental services. In general, these initiatives have to do with the services such as water cycle regulation, biodiversity conservation, and CO₂ capture and storage. Below is a brief summary of public, private and community initiatives relating specifically to forest conservation, reforestation and/or sustainable management.

Private Initiatives for Conservation, Reforestation and Sustainable Forest Management	Brief Description
<i>Fondo Ambiental Nacional</i> (FAN)	A nation-wide public-private initiative. A trust fund that manages debt-for-nature swaps to finance conservation actions throughout the country. There is also a Protected Areas Fund. The FAN also manages the ECOFONDO, capitalized with private investments, particularly from the <i>Oleoducto de Crudos Pesados</i> and ENCAN, which funds projects all along the oil pipe-line.
<i>Gran Reserva Chachi</i> (Esmeraldas)	A local-level private initiative. It consists of a form of direct payments made to support and conserve environmental services. International institutions finance the environmental service compensation based on the conservation of 4,700 hectares of forest. This experience inspired the creation of the <i>Programa Socio Bosque</i> and fueled the debate on the lessons learned.
PROFAFOR (reforestation)	A nation-wide private initiative, PROFAFOR is an Ecuadorian enterprise that functions like an extension of the Dutch consortium FACE and develops reforestation projects for the purpose of carbon sequestration. Funded by electric companies to compensate for their emissions, PROFAFOR has formalized 152 contracts with private and community owners since 1993.
Fundación Bosques para la Conservación	A local/regional private initiative, this foundation designs and implements native forest protection and conservation projects, thereby helping to reduce GHG emissions, increase biological diversity and support the environmental preservation and improvement in Ecuador and the world. For this purpose, it designed a system of payments for environmental services for conservation, especially the carbon stored in natural forests. Projects: it has formalized three forest conservation contracts with private owners in three sectors: La Sierra, Tandayapa and Pauma (province of Pichincha), covering a natural forest area of 2,200 hectares. It also signed a conservation agreement with the Ecuadorian Ministry of the Environment for the conservation of 3,700 hectares of natural forest within the “Colonso, Tena, Shiti and Inchillaqui” buffer forest located around Tena (province de Napo).
Chongón-Colonche Range Reforestation and Conservation Project	A local-level private initiative started in 1998 by <i>Fundación Natura</i> and the Ecuadorian Ministry of the Environment, with funding from KfW, it seeks to conserve the Chongón-Colonche dry forest in the provinces of Guayas and Manabí through control of buffer forest deforestation and sustainable farm production in the buffer zone. This project is in its final stages and is systematizing its lessons learned.

Table 4: Summary of public, private and community initiatives to promote forest conservation and sustainable management. Self-developed from several sources.

5. National REDD+ Strategy for Ecuador (under construction)

National REDD+ Strategy Components.

Its purpose is to contribute simultaneously to climate change mitigation and correct use of forest resources by implementing activities, projects, measures, and policies to reduce deforestation in Ecuador and its related GHG emissions.

Scope of the National REDD+ Strategy.

REDD+ (ENREDD+ in Spanish) is part of the National Climate Change Strategy (currently under development), a climate change mitigation mechanism, and of the new forest governance model (also under development), which aims to reduce deforestation in the country and sustainably manage Ecuador's forest resources.

REDD+ (ENREDD+ in Spanish) seeks to provide the frame of reference for the development and implementation of REDD+ activities in Ecuador. The Strategy should be seen as a tool to support the implementation policies, measures, activities, and projects aimed to reduce deforestation in Ecuador.

Elements of the National REDD+ Strategy.

One of the goals of the Forest Governance Model mentioned in section 1.7 is to reduce deforestation. Therefore, the MAE has decided that, initially, the National REDD+ Strategy should specifically contribute to meeting this goal. Thus, the elements of the National REDD+ Strategy were identified taking into account the Forest Governance Model.

This strategy consists of six components that were taken from those identified for the Forest Governance Model, namely: Forest Information System, Forest Control, Incentive Program (includes *Programa Socio Bosque*), Sustainable Forest Management, and Reforestation/Afforestation. The National REDD+ Strategy has a sixth component – normalizing land tenure – which is deemed important to meeting the goal of reducing deforestation and its associated emissions.

For each of these components, specific activities are presently being defined to contribute to the ultimate goal of the National REDD+ Strategy, which is to reduce greenhouse gas emissions caused by deforestation and forest degradation. Meeting this specific target is what differentiates this strategy from the Forest Governance Model, which seeks a broader purpose.

Seven cross-cutting Strategy components have also been identified: funding mechanisms, added social and environmental benefits, legal and institutional framework, inter-sector planning, involving key stakeholders, capacity building, and timber demand management.

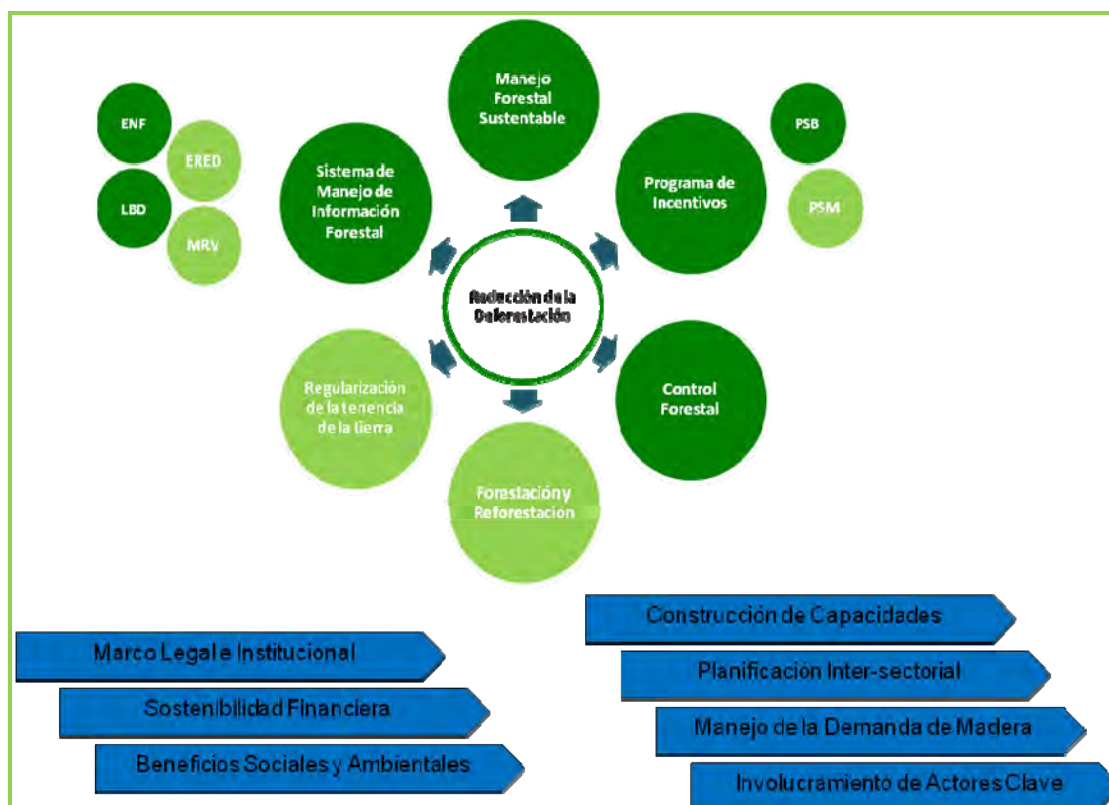


Figure 3: National REDD+ Strategy Components.

NFA, ERED, LBD, MRV		Sustainable Forest Management		PSB, PSM
	Forest Information Management System		Incentive Program	
		Deforestation Reduction		
	Legalization of Land Ownership		Forest Control	
		Afforestation and Reforestation		
Legal and Institutional Framework			Capacity Building	
Financial Sustainability			Inter-sector Planning	
Social and Environmental Benefits			Timber Demand Management	
			Key Stakeholder Involvement	

Why design a National REDD+ Strategy?

The political will now exists to reduce deforestation, as seen in both the Constitution and the *Plan Nacional para el Buen Vivir*. the Ministry of the Environment is the institution with jurisdiction over the forest sector through the *Subsecretaria de Patrimonio Natural* and is also responsible for climate change through the *Subsecretaria de Cambio Climático*.

Accordingly, the Ministry of the Environment is the institution in charge of developing and implementing climate change mitigation and adaptation measures, in coordination with other State entities, and for designing and executing measures for sustainable use of forest resources in Ecuador.

The MAE is currently developing the Forest Governance Model through its *Subsecretaria de Patrimonio Natural*. This model, as mentioned earlier, seeks sustainable management of Ecuador's forest resources, one of its goals being to reduce this country's deforestation rate. Meanwhile, the MAE is heading the process of building the National Climate Change Strategy through its *Subsecretaria de Cambio Climático*. This includes a Climate Change Mitigation Strategy and a Climate Change Adaptation Strategy.

The National REDD+ Strategy is part of both the Forest Governance Model, as a mechanism to help decrease deforestation, and the National Climate Change Mitigation Strategy (under construction as part of the National Climate Change Strategy), as a mechanism to reduce greenhouse gas emissions caused by deforestation and forest degradation.

Therefore, defining and implementing a National REDD+ Strategy has become a priority for the Ministry, being a measure that contributes to both climate change management and forest management.

How can REDD+ help to revert the Government policies that cause deforestation?

By including the National Climate Change Strategy and the Forest Governance Model, implementing the REDD+ mechanism in Ecuador can help reduce deforestation and related GHG emissions.

Furthermore, successful implementation of a REDD+ mechanism depends not only on the activities to be implemented nationally and locally, but also on inter-sector planning. It is necessary to build synergies and complementarities with other strategic sectors, which are currently defined by the Constitution and the *Plan Nacional para el Buen Vivir*. Fortunately, the country's decision to reduce deforestation – and its ensuing GHG emissions – is accompanied by a series of policies with their related goals. However, greater efforts are needed to articulate these policies with other production sectors, particularly the oil, mining and timber industries, whose dynamics make them a major challenge.

How to ensure that REDD+ will help improve the security of entitlements to land tenure, resources and carbon?

As mentioned above, one of the components of the National REDD+ Strategy is “Normalizing Land Tenure.” This is considered a Strategy component, because land tenure in Ecuador is highly informal, especially in rural areas. There is no up-to-date information on the status of land tenure in Ecuador’s forest areas.

In Ecuador, legalizing land tenure is deemed a prerequisite for implementing a REDD+ mechanism, and it should be addressed during the REDD+ preparatory phase in a country. Accordingly, the purpose for including this component as part of the Strategy is to solve land tenure issues in both forest and non-forest areas, thereby expanding the universe of potential beneficiaries of the REDD+ and PSB activities. This process also seeks to provide legal guarantees for land tenure rights among local inhabitants of forest areas.

The Ministry of the Environment is responsible for legalizing and normalizing land tenure of forest areas through the *Dirección Nacional Forestal*. The Ministry of Agriculture is responsible non-forest areas, making inter-agency coordination important between these two institutions. It is essential to join efforts to solve Ecuador’s land tenure problems.

With regard to carbon entitlements, the regulation of greenhouse gases is deemed an environmental service in Ecuador, and must therefore be regulated through legislation of Art. 74 of the National Constitution, which states that environmental services are not subject to appropriation and that the State shall regulate their use, production, provision, and exploitation. This law is currently under development, and an environmental services bill is expected to be available by late 2010. One of the issues that this law is expected to solve is defining the entitlement structure for environmental services provided by forests, as well as the legal instruments for exercising such rights, ensuring that any rights already acquired by the various stakeholders, especially indigenous peoples and nationalities, are respected at all times.

Ecuador’s position in REDD negotiations at UNFCCC and in other multilateral and bilateral processes: FCPF, UN-REDD, FIP

Since 2009, Ecuador has participated actively in REDD+ negotiations within the UNFCCC context. Five key negotiation points have been identified for REDD, among others: scale, scope or eligible activities, safeguards, funding, and REDD as part of the Nationally Appropriate Mitigation Actions (NAMAs). Detailed below is Ecuador’s position on each of these points.

Eligible Activities: Ecuador supports the idea of “REDD+”, that is, “*reducing GHG emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable forest management, and increasing forest carbon contents in developing countries.*” As for increasing

forest carbon stocks, Ecuador's position is that the reforestation activities that this country will recognize for REDD are those achieving reforestation / forestation with native species.

Scale: Ecuador supports implementing REDD+ activities on a national scale, that is, sub-national activities may also be developed. However, the emissions accounting, reporting and monitoring system shall be emissions shall be standardized on a national level. This includes defining standardized methods for collecting data on REDD (such as estimating forest carbon stocks or defining the referential scenario for emissions from deforestation).

Safeguards: Several environmental and social safeguards have been defined within the framework of the Convention. Ecuador supports some of the safeguards proposed in the negotiations, specifically those relating to the rights of indigenous peoples, forest conservation and biodiversity, and preventing the conversion of native forests to forest plantations with exotic species.

Financing: Ecuador supports the financing mechanism that combines funds and the market. Ecuador supports the idea that, for the REDD+ preparation phase, financing should come from funds or international cooperation. Subsequently, additional resources for the second phase, "defining and implementing policies and demonstration activities" and the third phase, "complete implementation" may be supplied by funds or through the carbon market by trading CO₂ emissions reduction credits.

REDD as part of NAMAs⁴: Ecuador does not support the idea of including the REDD mechanism as part of the NAMAs. Ecuador believes that the process of developing the NAMAs is not as far advanced as the REDD+ mechanism, and that the funding mechanism to implement REDD+ should be specific to REDD+ and additional, because it has different dynamics from other mitigation measures.

As for multilateral Programs established to help countries with REDD readiness, since October 2009 Ecuador has been part of the United Nations Collaborative Program on REDD (UN-REDD). At the third UN-REDD policy board meeting, it was formally accepted as a "observer" country. Accordingly, being an observer country, Ecuador will be able to receive future funding for REDD+ activities, once additional financial resources are available to the Program. Although it is not receiving financial resources yet, this country has certain benefits as part of the Program, including:

- Permanent observer status at the Program's Policy Board meetings;
- Technical support from UN-REDD implementing agencies (FAO, UNDP, UNEP);
- Access to the virtual "Workspace" platform to exchange information and experience with other countries and the UN-REDD Program;
- Attendance at regional workshops organized by the UN-REDD Program.

The Ministry of the Environment is actively working to raise funds from the UN-REDD Program to continue with the "REDD+ readiness" phase in Ecuador.

⁴ NAMAs: Nationally Appropriate Mitigation Actions.

This country is not part of the World Bank's Forest Carbon Partnership Facility (FCPF) Program to help countries during the REDD readiness phase, nor is it one of the five pilot countries of the World Bank's Forest Investment Program (FIP) Program to help countries implement the Mechanism during the REDD readiness and "policies and activities" phases.

In addition, at the Oslo meeting (Mayo 27) to create the "REDD+ Partnership", Ecuador ratified the Voluntary Partnership Agreement (VPA), thereby reiterating its commitment to implement the REDD+ mechanism in this country.

The "REDD+ Partnership" aims to create a funding mechanism to help developing countries implement the REDD+ mechanism through funds from six initial donor countries that, pursuant to the Copenhagen Accord (COP15 – December 2009), will allocate 3,500 million dollars during the 2010-2012 term to meet the above goals (not affected by the fact that we are signatories of the Copenhagen Accord).

With regard to the Copenhagen Accord and the Declaration of Cochabamba in Bolivia, Ecuador did not espouse either of the two declarations. However, it did acknowledge them as policy statements that can contribute to international REDD negotiations. On a policy level outside of the context of UNFCCC negotiations, Ecuador has shown support for the Bolivian initiative of the "World People's Conference on Climate Change and the Rights of Mother Earth".

Stakeholders' Participation and Consultation: Key Participants, Multi-Stakeholder Consultation Process, Decision-Making, Challenges and Obstacles.

For the purpose of implementing two of the cross-cutting components of the Strategy – "Involving Key Stakeholders" and "Capacity Building" – the Ministry of the Environment is designing a "REDD+ Stakeholder Involvement Program". This Program seeks to involve key stakeholders in the process of developing and subsequently implementing the National REDD+ Strategy, and includes four components:

1. Training/Information: This consists of providing information on the REDD+ mechanism, its implications and implementation features. This component will be implemented through specific events and the use of information dissemination tools.
2. Consultation: This process will determine whether or not key stakeholders agree with the mechanism and are interested in participating in developing and implementing it.
3. Involvement: a) Defining the mechanisms by which key stakeholders will participate in designing the ENREDD+; and b) Defining the means for ensuring effective involvement in executing the Strategy (including the REDD+ activities).
4. Capacity Building: This is the process of building local capacities to implement the Strategy through specific, pre-established activities.

Program implementation is expected to commence during the second semester of the year. The purpose is to design a long-term involvement Program with two phases: the first to develop and validate the

REDD+, and the second to implement the REDD+ locally. As for implementation, a partnership is being formed between the Ministry of the Environment and the domestic and foreign NGOs that will provide technical and financial resources for the Program.

The participatory process of developing the National REDD+ Strategy began in 2009 with a workshop in Quito for civil society stakeholders to present some preliminary ideas for the Strategy. Another two consultation workshops were held to develop the REDD+ standards, one for the civil society in Quito and another with representatives of indigenous communities from the Amazon. During 2010, a series of training/information workshops and work groups are planned to continue with ENREDD+ development and subsequent validation. Some of these workshops have already taken place over the last few months.

Furthermore, seeking to define the key stakeholders to be involved in implementing REDD+, with the support of ARA Regional and EcoDecisión, and in coordination with the MAE, they developed an initial stakeholder map and identified those that are directly related to the mechanism in the areas of training/communication, research, pilot project development, and political advocacy. They also analyzed the relations among the involved stakeholders and identified their activities and degree of progress. This stakeholder mapping did not include indirect actors who, although not contributing directly to REDD+ implementation, helped in meeting the goals of the REDD+ mechanism. Therefore, these stakeholders and the process of involving them still need to be identified. Annex X details the on-going activities.

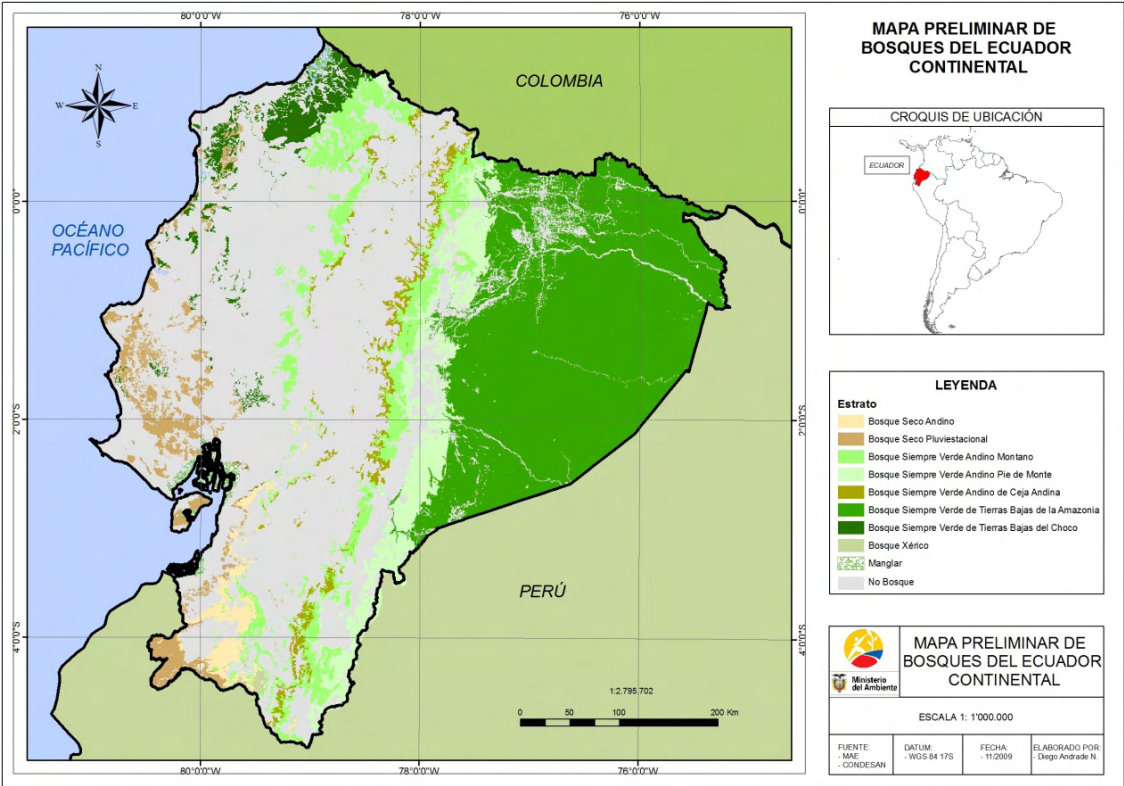
Carbon Baseline and Forest Inventory (what has been done so far)

Information relating to forest resources in Ecuador has shown reliability issues, particularly data inconsistencies, especially due to the use of different methodologies. The country does not have a lot of experience conducting forestry inventories. Ecuador's first official forest inventory was done in 1975 and only covered five of the country's provinces. The latest inventory done in the country was 20 years ago as a joint initiative of CLIRSEN and the *Dirección Nacional Forestal* of the *Ministerio de Agricultura, Ganadería y Pesca* (MAGAP).

The Ministry of the Environment has recognized the importance of having up-dated official data on forest resources, as an essential tool for achieving sustainable forestry development in Ecuador. This information is vital for consolidating and subsequently implementing the REDD+ mechanism.

Therefore, since 2009 the Ministry has headed two initiatives to gather data of importance for implementing the REDD+ mechanism. The first is the National Forest Assessment, which seeks to characterize the country's forest resources and determine carbon contents by forest type. The data collection and management methodology was developed in 2009, and the field data survey phase will begin during the second semester of 2010.

The National Forest Assessment predefined nine strata for native forests and two strata for areas without forests, making it possible to divide the country into statistically different potential units with regard to carbon stocks, which cover representative samples of the country's forest diversity.



Map 3. Types of native forest strata for Continental Ecuador. The nine forest strata are those used to design the National Forest Assessment sample. Source: MAE, National Forest Assessment. 2010.

Preliminary Forest Map for Continental Ecuador	
Location	
Legend	
Strata:	
Andean Dry Forests	
Dry Forests with Seasonal Rains	
Evergreen Andean Piedmont Forests	
Evergreen Andean Mid–Mountain Forests	
Evergreen Lowland Amazon Forests	
Evergreen Lowland Chocó Forests	
Xeric Forests	
Mangroves	
Without Forests	
Preliminary Forest Map for Continental Ecuador	
Scale, Source, Datum, Date, Prepared by:	

The second initiative is to define the historical deforestation map, which seeks to determine Ecuador’s current deforestation rate using a multi-temporal analysis over three periods: 1990 – 2000 – 2008. During 2009, the methodology was developed and validated in three pilot sites, and this year the nation-wide results will be obtained. The deforestation rates for the Amazon region should be available by August, and for the entire country by December.

The methodology developed to generate the Historical Deforestation Map for Ecuador took into account the criterion of mapping the evolution of changes in land use and coverage employed by Approach 3 established by the IPCC (2003). This approach spatially represents explicit, exhaustive national deforestation curves, achieving a consistent representation of land use and land cover types for the three referential years, thereby spatially characterizing deforestation.

Furthermore, developing a Reference Scenario for Emissions from Deforestation (ERED from the Spanish) is scheduled to commence this year, for which the methodology protocol should be developed and validated during the second semester of this year through multilateral international cooperation.

The process of building REDD+ social and environmental standards in Ecuador: main goals, potential use of the standards, ongoing and future activities.

Although REDD+ activities have the potential to generate significant social and environmental co-benefits, some have also highlighted potential risks, especially for indigenous peoples and other communities that depend on the forests. Recognizing the growing awareness –both domestic and foreign– of ensuring additional social and environmental benefits from implementing a REDD+ mechanism, on both the short and long term, the Ecuadorian Ministry of the Environment has decided to start a process of defining performance standards for REDD+ activities.

In order to ensure these co-benefits, the Ministry of the Environment has started a joint work plan with the Climate Community and Biodiversity Alliance (CCBA) y CARE International to develop the principles, criteria and indicators of a REDD+ standard. The hope is that they can be used by governments, NGOs, funding agencies, and other stakeholders to design and implement REDD+ programs and other forest carbon programs in a way that respects the rights of indigenous peoples and local communities while generating significant social and environmental co-benefits.

These standards will be designed to work with the new global REDD+ regime that is expected to emerge out of ongoing climate change negotiations within the context of the UNFCCC. They will be designed for government-led programs implemented at the national or state/provincial/regional level, that apply to all forms of fund-based or market-based financing.

This work plan has two phases. The first began in 2009 and developed the principles, criteria and indicators for the standard through a consultation process. In Ecuador, two consultation workshops were held with representatives from civil society and indigenous communities. The second phase of the work plan is national interpretation of the standard and implementation through pilot exercises. This phase will begin in July 2010 and will last for 18 months.

Socioeconomic and Biodiversity Co-benefits

Currently, having implemented the *Programa Socio Bosque*, Ecuador already has basis for defining the mechanisms by which additional social and environmental benefits can be ensured by implementing incentive policies aimed to reduce deforestation.

With regard to social benefits, the investment plans that PSB partners should develop, they ensure that economic incentives are invested in activities that contribute to enhancing beneficiaries' quality of life. According to investment plan outcomes at December 2009, 17% of the incentives were used for conservation purposes, 20% for institutional strengthening, 12% for savings, 8% for education, 16% for infrastructure, and 12% for production activities, among others. The PSB performs periodic assessments of investment plan fulfillment and has plans to accompany investment plan implementation through beneficiary training workshops.

To ensure environmental benefits, the PSB has a method for prioritizing its interventions according to three variables: level of deforestation threat, environmental services provided, and level of poverty. The second variable, "environmental services", includes three sub-variables: Water, biodiversity and carbon. Thus, including water and biodiversity in geographic prioritization analyses ensures priority is given to areas that, in addition to having high carbon contents, are also important to regulate water cycles and provide habitats for biodiversity conservation.

In addition, in order to identify and then empower the country's environmental and social co-benefits, the Ministry of the Environment is working with the UNEP World Conservation Monitoring Centre to determine the geographic location of those additional benefits. The initiative will develop maps and statistical analyses to determine the location of those benefits and cross that information with the country's carbon map.

Benefit Sharing Mechanism

Currently, three different approaches have been identified for developing REDD+ demonstration activities in Ecuador. The first is to develop REDD+ projects in areas that are part of the PSB; the second is to develop projects in State forest heritage sites and other areas under the jurisdiction of the Ministry of the Environment; and the third is through private initiatives that develop projects in areas that are not part of the PSB.

Accordingly, it is necessary to develop a mechanism for distributing the benefits contemplated under each of the possible alternatives for REDD+ projects in Ecuador. Therefore, an arrangement needs to be designed to distribute benefits among the different stakeholders involved in REDD+ initiatives. In principle, the Ministry has decreed that, in general, most benefits should go to forest owners or direct beneficiaries (indigenous communities or other local communities) who implement local activities to reduce deforestation and the associated emissions. In any case, specific benefit distribution will be

defined through environmental service regulations, pursuant to what is stipulated in Art. 74 of the Constitution.

The PSB can be seen as an example of one possible mechanism for distributing benefits, because yearly economic incentives are delivered directly to beneficiaries in a clear, transparent fashion for hectares under conservation, and instruments have been identified for assessing resource allocation. Should PSB areas receive additional resources for developing REDD+ projects, one alternative being discussed is for these financial resources to go into a trust fund that would be in charge of capturing and channeling funds in order to ensure the financial sustainability of the *Programa Socio Bosque*.

REDD+ Pilot Projects

Although the legal and institutional framework needed for developing REDD+ initiatives is still not in place, Ecuador presently has several private initiatives that are developing pilot projects. These initiatives are at different stages of development under direct coordination by the Ministry of the Environment.

During the second semester of this year, the *Subsecretaria de Cambio Climático* will develop a national registration system for mitigation and adaptation measures, which will also include the REDD+ initiatives.

Below is a summary of the REDD+ initiatives identified by May 2010 and the progress made on each one.

Nombre del proyecto	Ubicación (provincias)	Estado de avance	Volumen estimado (tCO2/vida útil)	Área (has)	Estándares	Organizaciones involucradas
Áreas REDD dentro del Programa SB	Nacional	Diseño	-	-	-	MAE –SB MAE - SPN MAE - SCC
Territorios Cofán	Sucumbios y Orellana	Factibilidad	50.000 por año	60.000	VCS y CCB	FEINCE, FSC, TNC, EcoDecisión
Territorio Achuar	Pastaza y Morona Santiago	Pre-factibilidad	-	800.000	-	NAE, Pachamama
Proyecto Putumayo	Sucumbios y Orellana	Pre-factibilidad	confidencial	confidencial	se adoptará estándar que acoja el MAE	MAE , WWF, Ecoserurities
Proyecto Piloto en la R Biosfera Sumaco	Napo	Pre-factibilidad	-	-	-	GTZ, comunidades de la zona
REDD+ con comunidades Kichwas en Orellana	Orellana	PDD en elaboración (para julio)	600.000 aprox.	30.000	VCS y CCB	Profafor
Comunidad Shuar Shaime, Bosque Protector Alto Nangaritza	Zamora Chinchipe	PDD en elaboración (para agosto)	500.000 aprox.	7.500	VCS y CCB	Profafor, Fundación Arcoiris
Cordillera de Guacamayos	Napo	Propuesta aprobada por el MAE	-	-	-	Profafor
Chongón Colonche	Santa Elena, Guyas y Manabí	Pre-factibilidad	-	71.256	-	Fundación Natura
Cantón Eloy Alfaro parroquia San Francisco de Console, Nac. Chachi	Esmeraldas	Propuesta	-	-	-	USAID, Proyecto Costas y Bosque, FECCH

Table 5. REDD initiatives under construction. Source and Author: Garzón, Andrea. *Mapeo de actores y experiencias en REDD+ en Ecuador. May 2010.*

Project Name	Location (provinces)	Status	Estimated volume (tCO2/useful life)	Area (hectares)	Standards	Involved Organizations
REDD areas in the SB Program	Nation-wide	Design	–	–	–	MAE – SB MAE – SPN MAE – SCC
Cofán Territories	Sucumbios and Orellana	Feasibility	50,000 per year	60,000	VCS AND CCB	FEINCE, FSC, TNC, EcoDecision
Achuar Territory	Pastaza and Morona Santiago	Prefeasibility	–	800,000	–	NAE, Pachamama
Putumayo Project	Sucumbios and Orellana	Prefeasibility	Confidential	Confidential	The standard adopted by the MAE will be used	MAE, WWF, Ecoserurities
R Biosphere Sumaco pilot project	Napo	Prefeasibility	–	–	–	GTZ, communities in the area

REDD+ with Orellana Kichwa communities	Orellana	PDD under development (for July)	Approx. 600,000	30,000	VCS and CCB	Profafor
Shuar Shaime Community, Alto Nangaritza Buffer Forest	Zamora Chinchipe	PDD under development (for August)	Approx. 500,000	7,500	VCS and CCB	Profafor, Fundación Arcoiris
Guacamayos mountain range	Napo	Proposal approved by the MAE	–	–	–	Profafor
Chongón Colonche	Santa Elena, Guayas and Manabí	Prefeasibility	–	71,256	–	Fundación Natura
Eloy Alfaro canton, San Francisco de Console parish, Chachi Nationality	Esmeraldas	Proposal	–	–	–	USAID, Costas y Bosque project, FECCH

Key Challenges for Implementing REDD+ in Ecuador

1. **Defining a Benefit Sharing Mechanism:** Although the Ministry deems that PSB proposes a benefit sharing mechanism that is already being implemented, at least three different potential means have been identified for developing REDD projects from a benefit-sharing perspective. Therefore, in light of the above, it is necessary to define a mechanism for broader benefit sharing to include other project types, such as private projects and those in protected areas or others under the Ministry's jurisdiction.
2. **Defining the Legal Framework for "carbon rights":** Ecuador has a new Constitution that states that environmental services are not subject to appropriation and that the State will regulate their use. Carbon storage is deemed an environmental service, so Ecuador needs to define a legal framework that, among other things, establishes "carbon rights" and the legal provisions to ensure their enforcement.
3. **Designing and implementing an MRV System:** Ecuador needs to develop an MRV (Monitoring, Reporting and Verification) System to monitor greenhouse gas emissions and the presents of co-benefits from implementing a REDD+ mechanism. That process should also include designing the required institutional arrangements, capacity building needs, and financing to implement the MRV system.
4. **Wood Demand Management:** It is necessary to understand timber demand in Ecuador and seek sustainable alternatives to help reduce this demand. In this regard, it is also necessary to address the issue of illegal logging.
5. **Participation:** It is essential to understand how to create a sense of ownership and commitment among all stakeholders, not only those that stand to benefit from REDD, such as indigenous communities, but also the private sector. How to ensure full, balanced participation by all significant stakeholders?
6. **Control and Incentives Policies:** Key questions to answer are: How to combine incentive policies effectively with control policies? How do make control policies more efficient?
7. **Sustainable Management of Forests:** Key questions are: Is Sustainable Forest Management a valid option to reduce deforestation? Under what circumstances?
8. **Institutional Framework:** It is necessary to understand the institutional architecture needed to implement a REDD mechanism in Ecuador, and how to overcome any barriers to creating such an architecture, so that incentive policies will provide a real opportunity to reduce deforestation, including cross-sector planning.

References

- Inter-American Development Bank (IADB), 2007, *Análisis Ambiental País*, prepared by the Manufactura Consortium, Ecolex, SCL Econometrics, Quito.
- CCBA, 2010. *Informe de Reuniones de Consulta, Estándares Sociales y Ambientales para REDD+* (paper under review), October 2009. Quito, Ecuador.
- CLIRSEN, 2003. *Centro de Levantamientos Integrales de Recursos Naturales por Sensores Remotos*, Forest Map for Continental Ecuador. Quito.
- Constitution of Ecuador, 2008. Montecristi, Ecuador.
- **FAO, 2005. Global Forest Resources Assessment 2005. Country Report: Ecuador.**
- **FAO, 2009. State of the World's Forests. Rome.**
- FAOSTAT – ForesSTAT. Internet: <http://faostat.fao.org/site/626/default.aspx#ancor>. Access: June 2, 2010.
- Francescutti, D. 2002. FAO. Regularización de la tenencia de tierras: evolución, costos, beneficios y lecciones el caso de Ecuador. Quito, Ecuador.
- Francescutti, D. FAO (2002): Regularización de la tenencia de tierras: evolución, costos, beneficios y lecciones
- Gatter, S. & Romero, M. 2005. *Análisis económico de la cadena de aprovechamiento, transformación y comercialización de madera aserrada proveniente de bosques nativos en la región centro-sur de la Amazonía ecuatoriana*. Servicio Forestal Amazónico. Macas, Ecuador.
- Hetsch, S. 2004. *La Comercialización de Madera en la Provincia de Pastaza*. With the collaboration of SFA, GTZ and the Provincial Council of Pastaza. Puyo, Ecuador.
- *Instituto Nacional de Estadísticas y Censos*, 2010. <http://www.inec.gov.ec/web/guest/inicio>. Access: June 2, 2010.
- Lascano, M. 2008. *Valoración de la Contribución Forestal a la Economía Nacional: caso de Ecuador*. Amazon Cooperation Treaty Organization and FAO Forest Commission. Quito, Ecuador.
- Ministry of the Environment, Project ECU/99/G31 GEF-PNUD (2000): Ecuador's First National Communication to the United Nations Framework Convention on Climate Change;
- Ecuadorian Ministry of the Environment, 2010. *Metodología de la Evaluación Nacional Forestal del Ecuador (ENF): con énfasis en la cuantificación de las reservas de carbono*. Draft paper. Quito, Ecuador.
- **Morales, 2005. Tenencia de la tierra, institucionalidad y conflictos. In: Foro La Tala Ilegal: Impactos sociales, económicos y ambientales. CEDENMA - CIFOP. Quito, Ecuador.**
- **Palacios, 2005. Potencial etnobotánico de los territorios indígenas en el Ecuador. In: Bosques Latitud Cero. No. 02:19-25. Loja, Ecuador.**
- Sanchez, R. 2006. *Cobertura Vegetal de la República del Ecuador, empleando información satelital*. CLIRSEN. Quito, Ecuador.

- **Sanchez, R. 2006A. La deforestación en el Ecuador. CLIRSEN. Quito, Ecuador. (Unpublished paper).**

Sierra, R. (Ed.). 1999. *Propuesta Preliminar de un Sistema de Clasificación de Vegetación para el Ecuador Continental*. A project by INEFAN/GEF-IB