



Readiness Preparation Proposal for Reducing Emissions from Deforestation and Forest Degradation

Version 2 Working Draft

Date of Submission:

June 9, 2014

Forest Carbon Partnership Facility (FCPF)

Republic of Paraguay

R-PP Template - Version 6

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- 2) UN-REDD countries submitting National Programs, as agreed.



Table of Contents

Executive Summary	6
ABBREVIATIONS AND ACRONYMS	9
Component 1: Organize and Consult.....	10
1a. National Readiness Management Arrangements	10
1b. Information Sharing and Early Dialogue with Key Stakeholder Groups	28
1c. Consultation and Participation Process	37
Component 2: Prepare the REDD-plus Strategy	50
2a. Assessment of Land Use, Land Use Change Drivers, Forest Law, Policy and Governance .	50
2b. REDD+ strategy options	87
2c. REDD+ Implementation Framework	96
2d. Social and Environmental Impacts during Readiness Preparation and REDD-plus Implementation	106
Component 3: Develop a National Forest Reference Emission Level and/or a Forest Reference Level	112
Component 4: Design Systems for National Forest Monitoring and Information on Safeguards	121
4a. National Forest Monitoring System	121
4b. Designing an Information System for Multiple Benefits, Other Impacts, Governance, and Safeguards	132
Component 5: Schedule and Budget.....	144
Component 6: Design a Program Monitoring and Evaluation Framework	147

Annexes

- 1 Legal, environmental, agricultural, forest and indigenous framework
- 2 Map of stakeholders
- 3 Minutes of meetings for R-PP preparation
- 4 Guidelines issued by the Federation for the Self-Determination of Indigenous Peoples (FAPI) for the implementation of the National Joint Program in Indigenous territories
- 5 Draft Protocol for a Consultation and Consent Process with the Indigenous Peoples of Paraguay, prepared by FAPI
- 6 National legal framework and ratified international conventions relating to safeguards
- 7 Forest Atlas Maps



List of Tables

Table No. 1	Existing Mechanisms for Resolving Complaints in Paraguay
Table No. 2	Criteria for Stakeholder Engagement
Table No. 3	Awareness-Raising Workshops with Indigenous Peoples 2012
Table No. 4	Assumptions for the Consultation Plan
Table No. 5	Soy – Area Planted, Production, and Yield
Table No. 6	Evolution of Soy Exports
Table No. 7	Estimation of the Forest Area Broken Down by Regions
Table No. 8	Estimation of Current Productivity and Sustainable Production of Forests
Table No. 9	Number of Industries and Estimate of Forest Production Capacity
Table No. 10	Potential Use of Land by Region
Table No. 11	Forest Area in Five Departments of the Eastern Region
Table No. 12	Forest Plantations Established as of 2012
Table No. 13	Principal Agents and Determinants of Deforestation and Forest Degradation in Paraguay
Table No. 14	Causes of Deforestation and Forest Degradation – Underlying Causes
Table No. 15	Strategic Options for Reducing Deforestation and Forest Degradation
Table No. 16	CO ₂ -e Emissions in Gg by sector in the 2000s
Table No. 17	Actions Needed for the Effective Implementation of a Safeguards System
Table No. 18	Capacity Strengthening for Implementing a Safeguards System
Table No. 19	Monitoring and Evaluation Framework

List of Maps

Map No. 1	Political Division of Paraguay
Map No. 2	Forest Cover by Department and Region
Map No. 3	Expansion of Soy Production – Eastern Zone
Map No. 4	Location of Silos
Map No. 5	Forest Coverage with Classification of Forests
Map No. 6	Protected Wilderness Areas in the Public Domain (Forest Coverage)
Map No. 7	NFI Sampling Points in the Eastern Region
Map No. 8	NFI Sampling Points in the Western Region

List of Charts

Chart No. 1	REDD + National Coordination Structure
Chart No. 2	REDD+ Operational Unit
Chart No. 3	Plan for Sharing the R-PP
Chart No. 4	Volume of Soy Production by Department
Chart No. 5	Sectoral Division of GHG Emissions Based on the Numbers Reported in the Second National Communication



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Summary of the R-PP

Dates of R-PP preparation (beginning to submission):	September 2013 – April 2014
Expected duration of R-PP implementation (month/year to month/year)	January 2015
Total budget estimate:	US\$ 5,905,000
Anticipated sources of funding:	from FCPF: US\$3,800,000 from UN-REDD: US\$565,000.- National government contribution:US\$1,000,000 (in goods, services, and human resources) Other source: US\$540,000 (Donation from the Government of Japan)
Expected government signer of R-PP grant request (name, title, affiliation):	Maria Cristina Morales Palarea Rolando de Barros Barreto Minister, Executive Secretary Environment Secretariat
Expected key results from the R-PP implementation process:	Outcome 1. Organization and consultation Outcome 2. Preparation of the REDD+ strategy Outcome 3. Development of a national forest reference emission level or a forest reference level Outcome 4. Design of systems for national forest monitoring and information on safeguards Outcome 5. Schedule and Budget Outcome 6: Monitoring and Tracking



Executive Summary

Paraguay has a surface area of 406,752 km², and a total population of 6,273,103 inhabitants, 58.8 percent of whom live in urban areas and 41.2 percent in rural areas. The Republic of Paraguay's territorial, political, and administrative system comprises 17 departmental governorships and 225 municipal governments.

Paraguay's small and open economy is heavily dependent on commodity exports, in particular soy and beef, which account for close to 50 percent of exports. However, poverty and inequality remain major development challenges, as one in three Paraguayans is poor and one in five lives in extreme poverty.

From a physiographical standpoint, Paraguay is divided into two major natural regions: the eastern region and the western region (Chaco), each of which has markedly different features. The western region (Chaco) covers 60 percent of the national territory and is home to slightly over three percent of Paraguay's total population. The eastern region, where the vast majority of Paraguay's population (97 percent) resides, covers the remaining 40 percent of the national territory. In terms of forest coverage, 84.3 percent of the forests are currently found in the western region and the remaining 15.68 percent in the eastern region.

From the 1960s and 70s, the expansion of the agricultural frontier coupled with an intensive settlement process that was, from an economic perspective, essentially based on logging and extensive farming including pasture cultivation, generated drastic and extensive changes in land use, resulting in a significant reduction in and deterioration of the Alto Paraná Atlantic Forests, Paraguay's largest continuous forest formation, which has been reduced to small, degraded forest remnants, as well as the deterioration of the natural resources and loss of biodiversity.

Based on preliminary findings in the National Forest Inventory that used 1990 as the baseline year, Paraguay's forest area was estimated at 21,929,253 hectares in 1990 and at 16,623,387 hectares by 2011, a 24 percent reduction at an annual rate of 252,660 hectares over this 21-year period.

The preliminary findings of the Forest and Carbon Inventory indicate that in the eastern region the identified forest area declined by 2,095,395 hectares between 1990 and 2011, a deforestation rate of 99,780.7 ha/year. During this same period, the decline in the western region was 3,210,471 hectares, a deforestation rate of 152,880 ha/year.

One of the main drivers of this deforestation was the increasing expansion of the agricultural frontier for soy production and pastures for the livestock industry. Although demand for firewood initially came from the peasant farmer sector, demand for this product now comes from the soy sector, which uses it for silo maintenance, and from the western sector of the livestock industry for cold storage plants. Thus, in addition to forest use and legal and illegal land clearing, wood is also an input for meat and soy production.



Sustainable wood supply is inadequate to meet current demand. This report points to a reduction in biomass of between 10 and 13 metric tons each year.

The UN-REDD National Joint Program (UNREDD-NJP) was signed in July 2011 for a three-year period ending in July 2014. A request to extend the deadline for completion of activities is being prepared. It is hoped that, together with the FCFP, this Joint Program, one of the initial technical and financial support initiatives for Paraguay's REDD+ process, will become the pillar for implementation of the REDD+ strategy.

The REDD+ strategy seeks to identify the exact link between the soy and livestock sectors and the deforestation rate. Opportunity costs and international price trends for both commodities, among other variables, will therefore be relevant. Furthermore, given that wood from native forests is an input for the production chain in both sectors, its price has an impact on the final price of these two products. Consequently, any measure aimed at replacing wood as an energy source will have an impact on these sectors. A sound understanding of how potential measures can impact this situation will pave the way for an assessment to determine which measures will be selected and how they will be implemented in order to mitigate the pressure on woods without severely impacting Paraguay's main GDP contributor.

Although Paraguay's policy and institutional framework is very extensive, weak institutional capacity hobbles application of regulations in force, and there are no regulations or procedures in place to ensure application of many of the current environmental laws, or adequate interinstitutional coordination and harmonization.

Bearing in mind the crosscutting nature of the REDD issue and existing intersectoral coordination challenges, the establishment of a comprehensive, multidisciplinary coordination structure with a view to sustainable development in Paraguay is being proposed. This structure will specifically spearhead the process at the national level, where secretariats collaborate with sector entities to take the ambitious steps toward a consensus-based National REDD+ Strategy that is in line with development and poverty reduction priorities in Paraguay.

Capacity building, an information exchange mechanism, a mechanism for handling and/or redress of grievances and complaints, and an anticorruption mechanism are all critical components of Paraguay's REDD+ program. Key basic elements such as the development of reference emission levels will be implemented at the regional (eastern and western) and national levels. Deforestation projections and simulated reference levels, including deforestation scenarios based on the simulation of the behavior of variables that explain the deforestation rate, such as commodity prices, wood prices, and land availability, are other essential aspects.

The National Forestry Institute will be at the helm of the MRV system. Its development is based on the National Forest Inventory and will continue with the process of compiling the necessary information and preparing reporting and verification protocols with a system for capacity building and information on forests and multiple benefits in conjunction with SEAM.



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A special team that will provide support to the REDD+ Technical Team will be tasked with designing the safeguards system, ensuring that current legislation, World Bank requirements, and the indigenous peoples are taken into account in the design and subsequent implementation of the REDD+ strategy.



ABBREVIATIONS AND ACRONYMS

BGR	Federal Institute for Geosciences and Natural Resources in Hannover
CAPECO	Paraguayan Chamber of Grain and Oilseed Exporters and Traders [<i>Cámara Paraguaya de Exportadores y Comercializadores de Cereales y Oleaginosas</i>]
CATIE	Tropical Agricultural Research and Higher Education Center
CNCC	National Climate Change Commission
Common Approach:	The Common Approach provides an overarching framework for the World Bank and development agencies to be Delivery Partners to provide R-PP Formulation and/or Preparation grants to FCPF REDD Country Participants.
CONAM	National Environment Council
CSO	civil society organization
EAP	Economically Active Population
ECLAC	Economic Commission for Latin America
ESMF	Environmental and Social Management Framework
FAO	United Nations Food and Agriculture Organization
FAPI	Federation for the Self-Determination of Indigenous Peoples [<i>Federación por la Auto-Determinación de los pueblos indígenas</i>]
FCPF	Forest Carbon Partnership Facility
FIP	Forest Investment Program
GDP	Gross Domestic Product
GHG	greenhouse gas
IDB	Inter-American Development Bank
INDERT	National Land and Rural Development Institute [<i>Instituto Nacional de Desarrollo Rural y de la Tierra</i>]
INDI	Paraguay Indigenous Peoples' Institute [<i>Instituto Paraguayo del Indígena</i>]
INFONA	National Forestry Institute
IPCC	Intergovernmental Panel on Climate Change
JICA	Japan International Cooperation Agency
MAG	Ministry of Agriculture and Livestock
MRV	Measurement, Reporting and Verification System
NGO	non-governmental organization
NJP	National Joint Program
OAS	Organization of American States
REDD	Reducing Emissions from Deforestation and Forest Degradation
RL/REL	Reference Level/Reference Emission Level
R-PIN	Readiness Plan Idea Note
SAS	Social Action Secretariat
SEAM	Environment Secretariat
SESA	Strategic Environmental and Social Assessment. SESA can be defined as “a range of analytical and participatory approaches that aim to integrate environmental and social considerations into policies, plans and programs and evaluate the inter linkages with economic, political, and institutional considerations.” SESA typically makes use of a variety of tools, rather than following a single, fixed, prescriptive approach.
TNC	The Nature Conservancy
ToR	Terms of Reference
UNDAF	United Nations Development Assistance Framework
UNDG	United Nations Development Group
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNPFII	United Nations Permanent Forum on Indigenous Issues
UN-REDD	UN-REDD Program
WWF	World Wildlife Fund



1a. National Readiness Management Arrangements

Component 1: Organize and Consult

**Standard 1a the R-PP text needs to meet for this component:
National Readiness Management Arrangements**

The cross-cutting nature of the design and workings of the national readiness management arrangements on REDD-plus, in terms of including relevant stakeholders and key government agencies in addition to the forestry department, commitment of other sectors in planning and implementation of REDD-plus readiness. Capacity-building activities are included in the work plan for each component where significant external technical expertise has been used in the R-PP development process.

1.a.1 Presentation

The National Constitution recognizes the right of the people of Paraguay to live in a healthy and ecologically balanced environment, and declares the preservation, conservation, and improvement of the environment, and its reconciliation with overall human development, to be of social interest. It also recognizes the equal rights and opportunities of all of Paraguay's inhabitants.

Law No. 1561/2000 established the National Environmental System (SISNAM), which is composed of two bodies: (i) the National Environment Council (CONAM), the consultative and deliberative body responsible for defining the national policy on the environment; and (ii) the Environment Secretariat (SEAM), an executive body responsible primarily for formulating, coordinating, executing, and supervising the national policy on the environment.

The **National Policy on the Environment (PAN)**, which was approved in May 2005, seeks to *"...conserve and manage the use of Paraguay's natural and cultural assets in order to guarantee sustainable development, equitable benefits distribution, environmental justice, and quality of life to present and future generations."* The PAN establishes its implementation instruments: the strategic environmental assessment, the environmental audit, quality standards, a control and surveillance system, citizen participation and social control, and economic, financial, and promotional instruments.

In May 2008, Law No. 3464/08 established the **National Forestry Institute (INFONA)** as an autonomous institution to replace the former National Forestry Service as the institution tasked with enforcing Forest Law No. 422/73 and other relevant laws. INFONA's Advisory Board recently approved the national forest policy, which seeks to *make the forest sector's contribution to Paraguay's sustainable economic growth as effective as possible by increasing the economic,*



social, and environmental benefits of the goods and services from Paraguay's forests, harmonizing and coordinating the forest policy with the environment policy and the other sector and national policies through ongoing adjustments, in conjunction with the public and private sectors. Its strategic components are institutional strengthening, improvements of the legal framework, forest land use planning, sustainable forest management, forest plantations and agroforestry systems, financing and incentives, competitiveness, controls and supervision, research, education, and outreach.

The preparation of its National Strategy and Action Plan for Biodiversity Conservation, the development of the National Program on Climate Change, and the formulation of a Five-Year Climate Change Plan (2008-2012), which includes the promotion of natural forest regeneration aimed at covering 10 percent of Paraguay's surface area, are some of Paraguay's key strategic accomplishments. The National Action Plan to Combat Desertification is at the validation stage. Paraguay has also prepared a National Forest Action Plan as part of the forest policy. Other initiatives include the establishment of the Chaco Environmental System, the Eastern Region Environmental System, debt-for-nature swaps, and land management plans in the Chaco region. The lack of monitoring and implementation of these strategies is a major weakness.

1. a.2 National legal framework

Paraguay has a legal framework that includes laws, decrees, and resolutions on such areas as the environment, indigenous peoples, gender, agrarian reform, and the establishment of institutions and agencies. Key laws include Law No. 422/73 (Forests), Law No. 294/93 (Environmental Impact Assessment), Law No. 536 (Afforestation and Reforestation), law No. 751/95 (Illegal Timber Trafficking), Law No. 352 (Protected Areas), Law No. 716 (Ecological Crime), Law No. 2524/04 (Zero Deforestation), Law No. 3001/06 (Environmental Services System), Law No. 904/81 (Statute of Indigenous Communities), and Law No. 1863/02 establishing the new Agrarian Statute. It should be noted that Paraguay has ratified the international conventions pertaining to the environment, indigenous peoples, and human rights. Details on the aforementioned laws are provided in **Annex 1**.

The national legal framework contains a number of laws that are indirectly related to aspects of climate change, in particular vulnerability, adaptation, and mitigation.

Although Paraguay's policy framework is very extensive, the regulatory and institutional framework is weak and inadequate owing to the non-existence of regulations or procedures to ensure application of many of the current environmental laws and to inadequate coordination and harmonization of current regulations. There is also a lack of clarity regarding the application of the legal framework relating to the use of forest products by indigenous communities, as well as weak enforcement of international conventions and agreements on forests and the environment.

SEAM is responsible for issuing regulations and procedures in the environment sector. These regulations must be mainstreamed into the relevant procedures of other entities such as the Ministry of Agriculture and Livestock (MAG), the Ministry of Public Health and Social Welfare



(MSPyBS), the National Environmental Health Service, governorships, municipalities, and other entities.

Despite the existing institutional shortcomings, the Government of Paraguay is taking steps to overcome these barriers and create an enabling environment. Since its establishment in 2008, **INFONA** has launched a process to revise forest regulations aimed at enhancing institutional and sector performance. INFONA has also collaborated with SEAM to revise regulations of relevance to both institutions, with a view to improving these regulations and their effective implementation. At the government level, both institutions have spearheaded the establishment of collaborative relationships with environmental NGOs to improve the level of implementation of their activities.

SEAM has been a pioneer in signing interinstitutional cooperation agreements with indigenous organizations such as the Union of the Ayoreo Native People of Paraguay [*Unión de Nativos Ayoreos del Paraguay UNAP*], the *Payipie Ichadie Totobiegosode* Organization (OPIT) for the defense and protection of their territories, and with the Mbya Guarani people, in particular the Association of the Indigenous Communities of Itapúa [*Asociación de Comunidades indígenas de Itapúa ACIDI*], and the *Teko Yma Jehe'a Pavee de Caazapá* Organization, with a view to pooling efforts to execute common projects designed to protect the environmental, natural, and cultural assets of the *Tekoha Guasu*, in accordance with their traditional practices and customary laws pertaining to use. The territory of these peoples has also been designated a Reserve Area for the San Rafael Park.

Con relación a las **garantías a los usos tradicionales a los pueblos indígenas en sus propios territorios, de sus recursos y su autonomía**, el marco jurídico del Paraguay, establece:

a. En la Constitución Nacional:

- **ARTICULO 62 - DE LOS PUEBLOS INDIGENAS Y GRUPOS ETNICOS:** Esta Constitución reconoce la existencia de los pueblos indígenas, definidos como grupos de cultura anteriores a la formación y organización del Estado paraguayo..,(sic)
- **ARTICULO 63 - DE LA IDENTIDAD ETNICA:**Queda reconocido y garantizado el derecho de los pueblos indígenas a preservar y a desarrollar su identidad étnica en el respectivo hábitat. Tienen derecho, asimismo, a aplicar libremente sus sistemas de organización política, social, económica, ..(Sic)
- **ARTICULO 64 - DE LA PROPIEDAD COMUNITARIA:** Los pueblos indígenas tienen derecho a la propiedad comunitaria de la tierra, en extensión y calidad suficientes para la conservación y el desarrollo de sus formas peculiares de vida. ..(sic)
- **ARTICULO 66 - DE LA EDUCACION Y LA ASISTENCIA:** El Estado respetará las peculiaridades culturales de los pueblos indígenas especialmente en lo relativo a la educación formal. Se atenderá, además, a su defensa contra la regresión demográfica, la depredación de su hábitat,.. (sic)

b. Ley 234/93



Artículo 7: que ratifica el Convenio 169 de la OIT sobre Pueblos Indígenas y Tribales) Los pueblos interesados deberán tener el derecho de decidir sus propias prioridades en lo que atañe al proceso de desarrollo, en la medida en que éste afecte a sus vidas, creencias, instituciones y bienestar espiritual y a las tierras que ocupan o utilizan de alguna manera, y de controlar, en la medida de lo posible, su propio desarrollo económico, social y cultural. Además, dichos pueblos deberán participar en la formulación, aplicación y evaluación de los planes y programas de desarrollo nacional y regional susceptibles de afectarles directamente en Países independientes establece:

Como puede apreciarse en el marco jurídico principal del Paraguay, garantiza expresamente que los Pueblos Indígenas tienen el derecho a la autonomía y control de sus territorios, y sin ningún problema pueden realizar .

Y además su derecho a la participación se encuentra también garantizado en gran parte del marco jurídico del país.

1.a.3 The Government's strategic climate change priorities

Following promulgation of Law No. 251/93 and deposit of its instrument of ratification at the United Nations Headquarters, Paraguay became a member of the UNFCCC. This step led to Paraguay's participation in negotiations culminating in 1997 with the approval of the Kyoto Protocol as an international legally binding instrument that aims to strengthen commitments made by developed countries to achieve the UNFCCC objective.

In view of the progress made in international negotiations and the Kyoto Protocol flexible mechanisms regulations, in particular with respect to the Clean Development Mechanism, SEAM submitted a draft decree to the executive for the establishment of a National Program on Climate Change (PNCC). This decree, which was promulgated by the Executive Branch as Decree No. 14.943 of October 9, 2001, aims to implement the PNCC under SEAM.

The **National Policy on Climate Change**, which represents the framework outlining the activities to be executed by the public and private sectors, and civil society in general, was drafted in 2011.

The drafting process for this policy sought to establish a broad, inclusive consensus-based national process involving the public and private sectors and civil society, with a view to proposing lines of action, policies, and strategies as a basis for the strengthening of the PNCC and its potential incorporation into the National Development Plan.

1.a.4 Progress made in the preparation and implementation of a National REDD+ Strategy

Paraguay has actively participated in the international REDD+ negotiations process from the outset in 2005, and is one of nine countries selected to pilot national UN-REDD+ programming efforts, following a request from the Paraguayan Government in August 2008. It submitted a draft R-PIN to the World Bank in 2008 as well, in the context of the Forest Carbon Partnership Facility



(FCPF). The experience gained in preparing the draft R-PIN has helped validate Paraguay's participation in the UN-REDD+ process, thus paving the way for a more effective preparation of this R-PP.

The UN-REDD National Joint Program (UNREDD-NJP) was signed in July 2011 for a three-year period ending in July 2014. Various political changes at the country level have impacted the effective implementation of its activities. As a result, a request to extend the completion date at no cost is being prepared, and will be supported by a mid-term review, the findings of which will be available in early June 2014.

The NJP seeks to support the Paraguayan Government's efforts to establish a national REDD+ program, taking into account applicable UN-REDD and FAPI guidelines for implementation in indigenous territories.

In order to attain the proposed objective, the Program will support capacity building at the national and local levels, with a view to achieving the following three outcomes and their respective outputs:

Outcome 1: Improved institutional and technical capacity of government and civil society organizations to manage REDD+ activities in Paraguay

Outcome 2: Capacity established to implement REDD+ at the local level

Outcome 3: Increased knowledge of and capacity building in REDD+ for forest-dependent communities, in particular indigenous peoples and other key stakeholders in the country

These three outcomes and the R-PP objectives will help Paraguay to prepare a REDD+ Strategy and continue the readiness preparation process for its subsequent implementation.

1.a.5 Institutional arrangements for REDD+ implementation

The R-PP aims to develop a REDD+ Strategy by adopting a participatory approach involving the public, private, and indigenous-peasant farmer sectors, as well as civil society, in keeping with Paraguay's vision for sustainable development.

Public and private entities, civil society, indigenous communities, peasant farmer organizations, the productive sector, women's groups, young people, and other key stakeholders in the REDD+ process are involved in the interinstitutional arrangement, which is based on lessons learned during implementation of the UNREDD-NJP.

Bearing in mind the crosscutting nature of the REDD issue and existing intersectoral coordination challenges, the establishment of a comprehensive, multidisciplinary coordination structure with a view to sustainable development in Paraguay is being proposed. This structure will specifically spearhead the process at the national level, where secretariats collaborate with sector entities to



take the ambitious steps toward a consensus-based National REDD+ Strategy that is in line with development and poverty reduction priorities in Paraguay.

An institutional arrangement that meets the following four goals is needed to facilitate the implementation of the REDD+ program in Paraguay:

- (i) The establishment of a national coordination mechanism with adequate decision-making authority and the instruments needed to ensure **interinstitutional coordination** and the mainstreaming of the REDD+ National Strategy into national, regional, and sectoral plans.
- (ii) An institutional anchoring for the REDD+ National Strategy to ensure that its plans and activities are supported and aligned with the activities and programs of the various government sectors and levels (national, regional, and local).
- (iii) A **coordination mechanism** that will ensure the participation of all key public and private institutions owing to their roles and responsibilities in the design and subsequent implementation of the draft strategy for the REDD+ readiness preparation phase.
- (iv) Effective coordination and efficient management of various sources of financing.

At the political and technical level, and with respect to execution, the following institutions should participate in and spearhead the process based on their respective capacities and areas of expertise: SEAM, INFONA, STP, MH, MAG, INDI, FAPI, and POJOAJU.

At the government level, in accordance with Law No. 1561/00, the **Environment Secretariat (SEAM)** is the national authority in the environment and natural resources sector. It shall therefore be responsible for implementing the REDD+ Strategy in close coordination with other state bodies, civil society, the private sector, peasant farmer and indigenous organizations, and other relevant stakeholders.

The **National Forestry Institute (INFONA)** will also participate in the implementation of the strategy in its capacity as the entity responsible for the policy on forests and forest resources.

The **Technical Planning Secretariat for Economic and Social Development (STP)** is the lead planning government institution responsible for coordinating, evaluating, designing, and promoting activities for the sustainable development of Paraguay, providing guidelines, studies, information, and technical assistance to formulate and implement plans and public policies designed to improve the welfare of the Paraguayan people, in accordance with the principles of equity, participation and social responsibility.

The **Ministry of Finance (Economy subsecretariat)** is responsible for conducting regular assessments and monitoring the country's economic situation, analysis of national accounts and the effects of economic policy measures on the general economy and public finances, in coordination with the institutions based on their respective areas of expertise. It reviews the prioritization of public investments and drafts macroeconomic guidelines for preparing the public sector budget, in coordination with the Technical Planning Secretariat for Economic and Social Development in the Office of the President. It contributes to the development of the National



Economic Program, and ensures that the economic programs of the nonfinancial public sector are consistent with the monetary program of Paraguay's Central Bank.

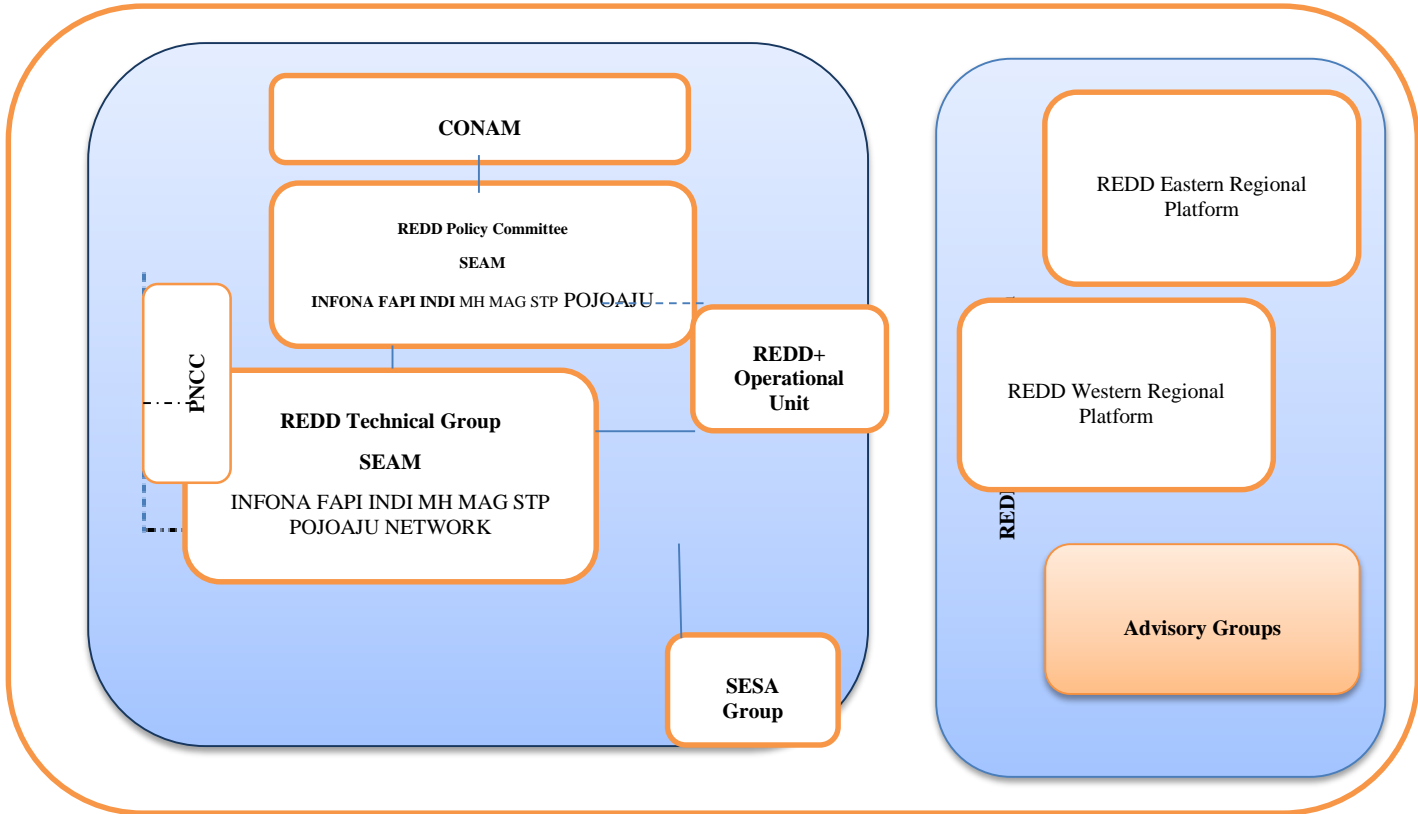
The mandate of **the Ministry of Agriculture and Livestock (MAG)** is to govern sector policy and promote sustainable agrarian development, thus helping improve the living conditions of the Paraguayan people. The MAG's objectives are as follows: strengthen family, community, and indigenous farming; promote the increased competitiveness of the agrarian sector, adopting a diversified, sustainable, and inclusive approach; promote the use of alternative agroenergy sources with sustainable socioeconomic development impacts; and strengthen the system's capacity, based on efficient and transparent administration and management of institutional services.

The Paraguay Indigenous Peoples' Institute (INDI) is a self-sufficient legal entity with its own assets, whose relations with the Executive Branch shall be maintained through the Ministry of Education and Culture; it, however, has the autonomy to establish direct links with other branches of government or national government agencies. Although the legal domicile of INDI shall be in Asunción, this entity may also establish regional offices. INDI currently has offices in Asunción only.

The representative for the indigenous sector and NGOs is the **Federation for the Self-Determination of Indigenous Peoples (FAPI)**, an NGO and autonomous representative indigenous federation composed of 12 organizations of indigenous peoples from the country's regions: the eastern region and the western (Chaco) region.

The Paraguay Association of NGOs (POJOAJU) is a non-profit legal entity established in 1998 with a view to linking, by means of a coordination body, Paraguay's NGOs and NGO networks. This association's technical representative is ROAM, a member of the National Climate Change Commission. ROAM is a network of civil society organizations that address issues related to the environment and sustainable development. They are members of POJOAJU.

Chart No. 1 - REDD+ Coordination Structure



Source: Prepared by the authors, 2014

The national coordination structure is as follows:

The **National Environment Council (CONAM)** provides a platform for consultation on, and the discussion and definition of, the national policy on the environment, and the Environment Secretariat (SEAM), the primary objective of which is to regulate the performance of the institutions tasked with preparation, standardization, coordination, execution, and control activities pertaining to the environment. The REDD+ Policy Committee, through SEAM, shall submit regular reports to CONAM on the activities conducted in the context of implementation of REDD+ activities at the national level.

The **REDD+ Policy Committee:** The members of this committee shall be the Executive Secretary and Minister of SEAM, the President of INFONA, the President of FAPI, the President of INDI, the Minister of Finance, the Minister/Executive Secretary of STP, the Minister of the MAG, and a high-level representative from the POJOAJU network. The Policy Committee will provide the strategic direction for the national policy and development vision to the National REDD+ Technical Group, and may include other organizations and institutions deemed relevant in a



phase-based plan in accordance with the level of progress made by Paraguay with respect to the REDD+. The representatives of international cooperation agencies that are supporting national REDD+ initiatives will participate in the REDD+ Policy Committee as observers.

The **National Program on Climate Change (PNCC)**, which is the national entity under the authority of SEAM tasked with implementing the provisions in the National Policy on Climate Change, and its National Climate Change Office (ONCC) shall serve as a technical advisory body to the REDD+ Technical Group.

The **National REDD+ Technical Group**: This Group is composed of representatives from SEAM, INFONA, FAPI, INDI, MH, STP, and MAG, ROAM representing civil society, and the Rural Network. This Group shall define technical guidelines for the REDD+ Operational Unit.

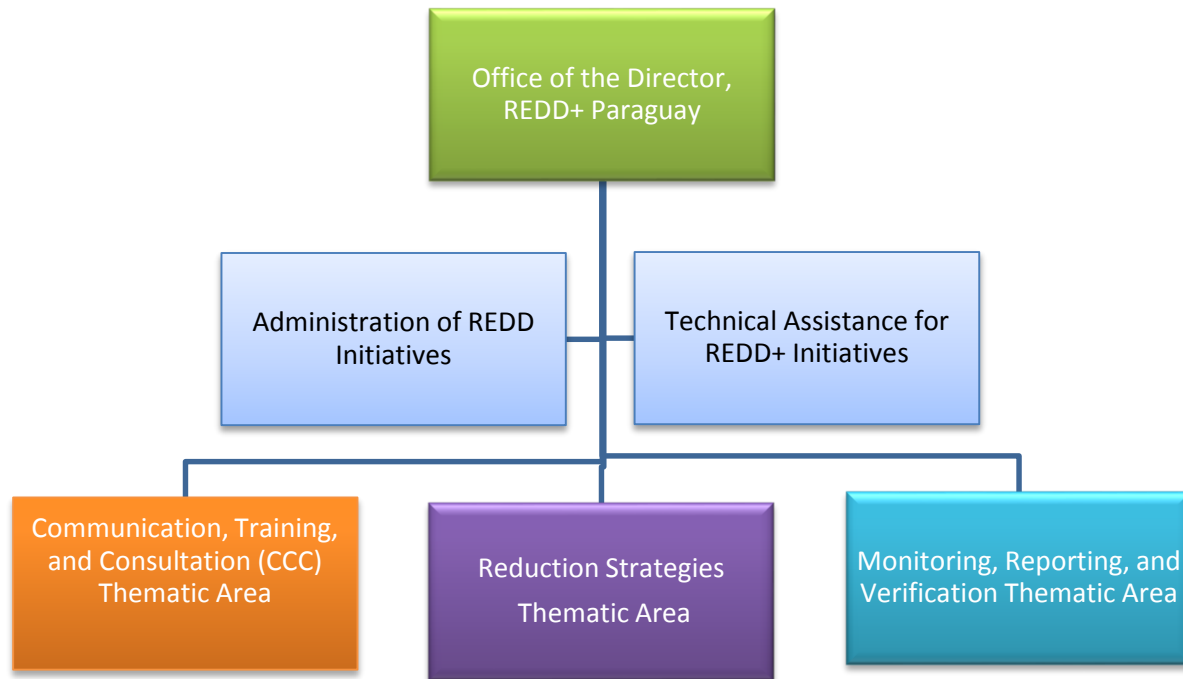
The **National REDD+ Platform**: This platform is a forum for participatory dialogue aimed at providing recommendations for the implementation of the National REDD+ Strategy. It will work in conjunction with the regional platforms, the Advisory Group with support from the REDD+ Operational Unit, and the National Technical Group. Platform participants shall be the institutions belonging to CONAM, the Forest Advisory Council, and INFONA, which include representatives from government development entities (ministries and decentralized entities), civil society organizations, and the private agricultural and livestock sector. Indigenous communities, peasant farmer organizations, women's groups, young people, academia, and other relevant stakeholders for the REDD+ process will also participate in this platform.

REDD Regional Platforms: Two regional platforms have been proposed—one each for the eastern and western regions. These platforms will provide to the National Platform and the REDD Policy Committee technical criteria and guidelines pertaining to the formulation and implementation of the National REDD+ Strategy. The specificities of each region will be presented to the National Environment Council. A representative from each region will serve on the National Platform.

Advisory Groups: These Groups perform the following functions: advise the National REDD+ Platform on social and environment decisions; compile the initiatives and proposals from the groups they represent; generate inputs to develop and monitor the National REDD+ Strategy; prepare proposals on sector and territorial level programs and measures that must be adopted in order to ensure the appropriate implementation of the REDD+ program in the country, and which will be submitted to the National Environment Council.

SESA Group: This group shall be responsible for addressing environmental and social priorities emanating from the process for implementing the programs and projects. Component 2d describes the responsibilities and composition of this group.

Chart No. 2 - REDD+ Operational Unit



The **REDD+ Technical Group** and the **Policy Committee** will provide technical and strategic guidelines to the **REDD+ Operational Unit**. This operational unit will be responsible for managing the REDD+ process in Paraguay, will collaborate with the participating institutions and the established Advisory Groups, and will provide support for the operational management of the regional platforms.

Financing of this operational unit and the activities related to the National REDD+ Platform will be provided by the Government and international and domestic cooperation initiatives, based on the availability of the participating public, private, and civil society organizations and other institutions. Support to the National Platform will take the form of goods and services from national institutions.

The Unit will be made up of the following levels:

Office of the Director, REDD+ Paraguay: responsible for managing the Operational Unit of the National REDD+ Platform, and will be supervised by the REDD+ Technical Group, and may address the requirements of the Policy Committee.

Financial Administration of the REDD+ Initiatives: responsible for administrative and financial management, including management of new resources for the implementation of actions designed to reduce deforestation and forest degradation.



REDD+ Technical Assistance: provides technical and operational support for the development of activities for the national platform and to its technical groups and regional platforms.

Technical Group 1: This group will be composed of technical representatives from SEAM, INDI, FAPI, and POJOAJU, and may include other institutions.

Technical Group 2: This group will comprise representatives from the Technical Planning Secretariat, the Ministry of Finance, and the Ministry of Agriculture and Livestock, and may include other institutions.

Technical Group 3: The members of this group will be representatives from the National Forestry Institute and the forest engineering program at the National University of Asunción (*Universidad Nacional de Asunción*), and may include other institutions.

The thematic areas will be supported by national and international experts who will be involved on the basis of the requirements for implementation of the activities. This plan helps define clear roles and responsibilities without eliminating the need for coordination into themes that are crosscutting across all areas.

1. a.6 Relevant national stakeholders for REDD+

The relevant stakeholders for REDD+ are governmental, nongovernmental, and private sector institutions, as well as grassroots organizations, including peasant farmer and indigenous organizations. Under the UNREDD-NJP, a series of stakeholders linked to REDD+ has been identified. With a view to synergy between both initiatives, the R-PP will consider this initial mapping of stakeholders, which will be revised and broadened in a participatory manner during the project's initial phases. A list of stakeholders that have an important role to play in the implementation of REDD+ activities is provided in Annex 1 of the document, which includes an analysis of each of these stakeholders and their potential participation in REDD+ activities.

a. Governmental organizations (national, departmental, local)

Environment Secretariat (SEAM), CONAM, National Forestry Institute (INFONA) – Forest Advisory Council, Ministry of Agriculture and Livestock (MAG), Social Action Secretariat (SAS), the Paraguay Indigenous Peoples' Institute (INDI), National Land and Rural Development Institute (INDERT), Ministry of Industry and Commerce (MIC), Technical Planning Secretariat (STP), Vice Ministry of Mines and Energy (VMME), Ministry of Finance (MH), National Tourism Secretariat (SENATUR), Itaipu and Yacyreta binational entities, departmental governments, municipalities, and the National University of Asunción.

Other institutions: National Emergency Secretariat (SEN), Ministry of Education and Culture (MEC), Ministry of Public Health and Social Welfare (MSPBS), Women's Secretariat (SM), and the Children's Secretariat (SN).



b. NGO networks and grassroots organizations

POJOAJU – Paraguay Association of NGOs; Network of Environmental NGOs – ROAM; Network of private nonprofit entities supporting indigenous peoples; the rural network of private development organizations; National Federation of NGOs for Peasant Farmer Development – Tekokatu; Alliance of Leaders for Sustainable Development (ALIDES), Paraguay Network for Conservation on Private Land, National Coordination Committee of Peasant Farmer Organizations (MCNOC), National Peasant Farmer Federation (FNC), and National Peasant Farmer Organization (ONAC).

Other grassroots organizations: Paraguay Peasant Farmer Movement (MCP); Alto Paraná Farmers’ Association (ASAGRAPA); National Coordination Office for Rural and Indigenous Women (CONAMURI); Movement for the Struggle for Land (OLT); Peasant Farmer Association for Integrated Development (ACADEI); National Center of Peasant Farmer, Indigenous, and Grassroots Organizations (CNOCIP).

c. Private sector

Paraguayan Federation of Lumbermen (FEPAMA), Paraguay Rural Association (ARP), Paraguay Agricultural Coordination Office (CAP), Federation of Rural Lumbermen (FEPAMI), the Forestry Society, Mennonite Cooperatives of Chaco, Federation of Production Cooperatives (FECOPROD), and the Chamber of Grain and Oilseed Exporters (CAPECO).

Other private organizations: Paraguay Union of Industrialists (UIT); Clean Production Center (CPL)

d. Networks of Indigenous Peoples’ Organizations

Federation for the Self-Determination of Indigenous Peoples (FAPI), Federation of Associations of Indigenous Communities of the Eastern Region

Other organizations

Union of the Ayoreo Native People of Paraguay (UNAP), among others.



1. a.7 Mechanism for information sharing, handling and/or redress of grievances and complaints during the preparation and implementation of REDD+ in Paraguay

Many REDD+ activities may have positive direct as well as negative impacts at the local level, especially in indigenous and peasant farming communities, and the agricultural and livestock sectors responsible for most of the deforestation in Paraguay. More specifically, impacts are expected on land tenure, sources of income, the traditional uses of resources, use of wood for energy production, among others.

Because of the negative impacts it is vital that those potentially affected have an opportunity to express their concerns and, where appropriate, request that the problems be remedied, through a “claims and grievances mechanism.” This is why a definition of this mechanism is required as part of the management framework for REDD+ in Paraguay. Considering this, it is necessary to ensure that from the initial stages of the readiness process, this mechanism is in place as a priority activity in the consultation and participation process. The key criteria for the development of the mechanism will be timely attention, inclusion, accessibility, equity and transparency.

In general, a claims and grievances mechanism involves the adoption of a system of standards for REDD+ and the establishment of an administrative authority to determine whether those standards are being achieved with the implementation of specific activities.

The functions of the grievance mechanism should include: fact-finding, support, dispute resolution, compliance assessment, granting remedies or solutions, and/or granting compensation.

In order to ensure long-term success, it is essential that any international REDD+ initiative provide tools to consider, address, and minimize such impacts from REDD+ activities.

1. a.8 Progress nationwide

The process of consultation and discussion of this mechanism was led by SEAM in the assessment phase and it is considered that this should be implemented under the national authorities in charge of the matter, such as INDI, the Ombudsman and other bodies that are considered relevant and are identified in the course of the process, working in coordination with the REDD+ Technical Group, to which end it is expected that institutional capacity will be strengthened so that it can be implemented.



Under the UNREDD-NJP an International Workshop on “Environmental, Social, and Human Rights Safeguards” and “Development of a Roadmap for Implementation of a Dispute Resolution Mechanism” was held in April 2013. Working groups were formed, allowing participants to identify several important points through collective analysis of the country’s problems in order to formulate a proposal for resolution or mediation of disputes in the country. The result of this participatory work is set out below in Table No. 1.

Table No. 1
Examples of Existing Mechanisms for Resolving Complaints in Paraguay

Constitution	Judiciary	Legislature	Executive
Article 40 of the Constitution (the right to petition the authorities)	The Judiciary and its Courts of Justice The Human Rights Division of the Supreme Court of Justice	Human Rights Committee (Congress)	Ombudsman INDERT Office of the Attorney General and its prosecutors, SEAM, environmental prosecutors, police and governorships INDI

1. a.9 Land disputes

During the workshop held in April, 2013, there was consensus among participants that many of the violations of rights and damage to forests are related to **land disputes** and the destructive and uncontrolled expansion of the agroindustrial frontier. In many cases there are land disputes between indigenous peoples and agribusiness, with the latter often led by Brazilian settlers (eastern and western zones) or Mennonites (western zone). There is a strong claim that State authorities do not address complaints. Often the only solution is to take direct actions through public demonstration in order to draw attention to the violation of their rights.

By law indigenous territories cannot be sold or transferred, yet their territories continue to be encroached upon, there are situations in which their titles (the Brazilian settlers) are not legitimate. Our communities must resort to extreme situations such as the blocking of roads in order to be heard [Chaco indigenous leader, group work]

Legal insecurity, deforestation include the impunity which leads to the invasion of their land, illegitimate titles are produced, these invaders also have title to the property [Chaco indigenous participant, group work]

From inside the INDI the territory is leased or sold to soybean farmers. Before the National Secretariat for Urban Housing and Habitat (SENAVITAT) each community lived according to its Teko, the presence of SENAVITAT ... authorizes the leasing of lands to companies. The dispute involving the



indigenous peoples is in relation to their land and their habitat ... [indigenous participant, group work]

The working groups at the workshop raised a number of interesting proposals for a roadmap to establish a compliance mechanism and resolve complaints.

1.a.10 Proposals to design and establish a mechanism to resolve complaints

It is recognized that the implementation of REDD+ initiatives at the national level are not intended to solve the land tenure problems, but to create a space for dialogue so that solutions can be found, to which end it is necessary to:

- Conduct participatory case studies of current forest and land disputes in Paraguay (at least two in the western region and two in the eastern area), in order to identify the causes of dispute and analyze the strengths and weaknesses of existing mechanisms for resolving complaints
- Inform the decision-making authorities of the workshop
- Establish a national NJP roundtable on mechanisms for resolving complaints. This must be a high-level roundtable with government participants having decision-making powers, along with indigenous peoples and different sectors of society
- Train and build awareness in civil servants and employees in offices of the prosecutor, governorships, and municipalities on issues of safeguards, rights, and environmental protection
- Involve governors and prosecutors so they become aware of rights and safeguards
- Involve human rights prosecutors, the courts and other institutions through visits to these offices
- Strengthen existing mechanisms so that they can be used to resolve disputes as well as the national institutions responsible for dealing with the issue

The process of designing and establishing a mechanism for resolving complaints must be agreed to in Paraguay between sectors and rights holders in the country. At present there are very specific proposals on specific topics, such as those related to the participation or non-participation of isolated indigenous peoples, which should be done at UNREDD-NJP level and they should be used in any REDD+ process.¹ This is summarized in a phase chart set out below:

PHASE I: ANALYSIS AND CONSULTATION

- Initiate a participatory process to analyze current disputes in the country (forest, environmental, and land sector): eastern and western zones

¹ Berraondo, M (2013) *[Los Pueblos en Aislamiento Voluntario y Contacto Inicial (PAVCI) y mecanismos de resolución de conflictos [Peoples in Voluntary Isolation and Initial Contact and dispute resolution mechanisms]*. International Workshop, April 11, 2013, Asuncion, Paraguay



- Identify and assess current mechanisms in the country (the authorities, performance, effectiveness)
- Propose options for supplementary and/or strengthened mechanisms nationwide - including proposals for reforms (filling gaps)
- Conduct consultations with various ministries, agencies, national safeguard authorities, civil society and indigenous peoples on the feasibility and the advantages and disadvantages of various options: select a preferred option.

PHASE II: DESIGN AND TRAINING

- Develop a draft of terms of reference (location of the institution(s), mandate, **scope and jurisdiction**, receivability rules, rules of procedure and disclosure of information, verification system, personnel, budget, etc.)
- Consult on the ToR and finalize (state agencies, indigenous peoples, civil society)
- Conduct a training program

PHASE III: Test and Adjust

- Test the mechanism (or mechanisms) for a pilot period
- Seek feedback from the claimants/affected communities
- Evaluate the performance/effectiveness
- Make adjustments to correct weaknesses

PHASE IV: Operation

- Activate the mechanism
- Check the results
- Submit regular reports
- Share lessons and recommendations with the State and civil society (continuing education)

As a final point, to establish an effective mechanism for Paraguay's National REDD+ Strategy it will be essential to ensure that its guidelines for receivability allow violations of agreed safeguards and non-compliance with commitments on the issue of rights are appropriate to be handled through this mechanism.

This means that rightsholders and affected communities should have the right to complain about the lack of implementation of social and environmental elements as well as of the policies, safeguards, and commitments of the UN-REDD program, the R-PP and the relevant policies of its member agencies (UNDP, UNEP, FAO) and other donors.

With regard to this criterion, in order to avoid duplication and confusion, there is an urgent need to clarify the scope and authority of a national mechanism for resolving complaints, as



well as the mandate and authority of international bodies to have accountability, such as the international mechanism currently being designed by UNDP.²

1a.11 Risk Assessment for REDD+ in Paraguay - CRA

Corruption Risk Assessment (CRA) is carried out in order to identify corruption risks during the REDD+ preparation and implementation phase and identify measures to avoid them. The CRA will be done using the methodologies developed for such purposes by the FCPF and UN-REDD, which includes task teams, documentary research, identification of stakeholders, institutional context, surveys, group discussions, data analysis, validation of findings, and recommendations. The results of the CRA REDD+ process may serve as inputs for structuring the National System of Safeguards.

Nationally, the Anti-Corruption Secretariat is responsible for dealing with these issues, so mechanisms for strengthening of its REDD+-related aspects will be provided. The actions to be undertaken will be closely coordinated with the REDD+ Technical Group and the Policy Committee.

1. a.12 Strengthening, Participation, and Capacity Building

One of the key elements for the effective operation of an organizational system is to have informed staff in place and adequate capacity to implement the tasks required. In this regard mechanisms for continuous training of employees in public, private and indigenous sector institutions is required owing mainly to high staff turnover and new developments in the area of climate change and REDD+.

In this regard the aim is to develop courses on REDD+ in Public Universities that will be standard and available for technical staff (public, private, indigenous) at least twice per year. They will be designed according to the target audience and in line with the REDD+ development process in Paraguay.

Likewise, an attempt will be made to ensure the participation of the relevant stakeholders in the discussion and process of building the National REDD+ Strategy through participation mechanisms jointly agreed upon, through permanent representatives, and national and regional technical teams, among others. Support for the training and active participation of peasant farmers, women, and youth in the REDD+ process will be provided.

² See - UNDP (2013) *Proposal for Environmental and Social Compliance Review and Dispute Resolution Process, Discussion Paper and Proposal*, February 2013



Component 1a: Organization and Preparation for Consultation						
Main Activity	Sub-activity	Estimated Costs (in thousands of US\$)				
		2015	2016	2017	2018	Total
Development of mechanisms for training in REDD+ for the public/private sector jointly with private/public educational institutions	Courses/Workshops/Indigenous Sector Trainers	10	20	10		40
	Courses/Workshops for small farmers/peasant farmers	10	20	10		40
	Courses/Workshops Public Sector	10	20	10		40
	Courses/ Workshops Public Sector (Agriculture, Forestry)	10	20	10		40
	Courses/Workshops for women/youth	10	10	10	10	40
Support for participation in the REDD+ process	Design and implementation of mechanisms for joint participation with local, indigenous communities in regional and national institutions	10	20	5	5	40
	Institutional Strengthening of the Indigenous Sector and INDI	10	15	15	15	55
	Regional Institutional Strengthening for REDD+	10	15	15	15	55
	Strengthening peasant farmer groups, women and youth	10	10	10	10	40
Management of the REDD+ Platform	National REDD+ Coordination	30	40	40	40	150
	Support for advisory groups	10	10	5	5	30
	Financial Management	35	35	35	35	140
Functioning of the Technical Group and the REDD+ Coordination Unit	Unit Staff	30	30	30	30	120
	Functioning of the Technical Group	10	10	10	10	40
	Offices and equipment	10	10	10	10	40
Operation of the CONAM Policy Committee	Functioning and meetings of the Policy Committee and CONAM	5	5	5	5	20
Strengthening the PNCC	Functioning and meetings of the CNCC	5	5	5	5	20
	Functioning of the ONCC in relation to REDD+ issues	10	10	10	10	40
Strengthening national participation level at the global level	Lobbying with political, economic and decision-making stakeholders	15	15	15	15	60
	International negotiation for the positioning of Paraguay in the international arena and the mobilization of REDD funds	10	20	15	10	55
Grievance and Anti-corruption Mechanism	Evaluation of existing complaints and anti-corruption mechanisms, indigenous/private sector	10	15	5		30
	Design of the mechanism in a participatory manner	5	5			10
	Dispute Resolution Mechanism	5	15	10	5	35
	Implementation of the mechanism		20	15	10	45
Total		280	395	305	245	1225
Government		40	45	30	45	160
FCPF		120	350	275	200	945
UN-REDD		120				120



1b. Information Sharing and Early Dialogue with Key Stakeholder Groups

Standard 1b the R-PP text needs to meet for this component: Information Sharing and Early Dialogue with Key Stakeholder Groups

The R-PP presents evidence of the government having undertaken an exercise to identify key stakeholders for REDD+, and commenced a credible national-scale information sharing and awareness raising campaign for key relevant stakeholders. The campaign's major objective is to establish an early dialogue on the REDD-plus concept and R-PP development process that sets the stage for the later consultation process during the implementation of the R-PP work plan. This effort needs to reach out, to the extent feasible at this stage, to networks and representatives of forest-dependent indigenous peoples and other forest dwellers and forest dependent communities, both at the national and sub-national level. The R-PP contains evidence that a reasonably broad range of key stakeholders has been identified, voices of vulnerable groups are beginning to be heard, and that a reasonable amount of time and effort has been invested to raise general awareness of the basic concepts and process of REDD-plus including the SESA.

1. b.1 REDD+ readiness process

The REDD+ readiness process (R-PP) is geared to building and strengthening the preparation of the National REDD+ Strategy for its establishment, involving various stakeholders and strengthening national capacities to manage forests at the local, regional and national levels. This entails having the capacity to reach cross-sectoral, cross-cultural participatory land-use agreements using a differential and long-term approach.

In this regard, Paraguay recognizes fundamental rights as the participation of and consultation with the forest-dependent communities; as such it is important to create mechanisms that permit these rights to be enforced.

This REDD+ readiness process was already launched in 2011 with the implementation of UNREDD-NJP by SEAM, FAPI and INFONA, where the main achievements to date are listed below:

1. REDD National Committee: two meetings held, 70 participants, a sharing structure, and institutional appointments have been requested so that a meeting can be held in the first half of 2014
2. REDD National Plan/National Strategy: one workshop held, 120 participants - first workshop where stakeholders were involved and the focus was on the progress of the program
3. Legal Aspects: Two presentations on results, an analysis was done of the types of land tenure in Paraguay and legal aspects of carbon ownership. Also, there was timely support



- for aspects linked to environmental services, five draft resolutions presented, one draft decree, all promulgated
4. Mapping of Ancestral Territories: a first approximation was done which will later be incorporated into a special map, one presentation before the FAPI plenary (12 indigenous organizations)
 5. Analysis of land tenure and indigenous territories in progress
 6. Determination of the opportunity costs of land use: An analysis of the opportunity costs of the main sources of deforestation and degradation was carried out. Two presentations made, agricultural activities of 17 departments analyzed
 7. Base maps: the cartographic base was compiled and should serve to determine future deforestation scenarios
 8. Future Deforestation Scenarios. The process for determining scenarios commenced with the use of base maps
 9. Multiple Benefits: progress was made with the production of a potential deforestation map, compiling information worldwide and relating it with the benefits prioritized nationally. Also, progress was made in the production of a map showing a potential for rehabilitation, which will be completed with the support of national experts in the first half of 2014
 10. Analysis of the causes of deforestation and forest degradation: Study that has been the basis for the /National REDD+ Plan/Strategy. Information was expanded with an analysis of each driver of deforestation, which has been the basis for the R-PP
 11. Mapping of the requirements for the implementation of a complaints and dispute resolution mechanism at the national level was carried out, taking into account national and regional experiences in this context
 12. An international workshop was conducted on environmental, social, and human rights safeguards where two working groups convened: one on safeguards and another on conflict resolution, involving more than 100 persons, where 55 percent of participants registered were women and 45 percent men
 13. Six information-sharing workshops with indigenous peoples (6)
 14. Two information-sharing workshops with local governments (2)
 15. National Forest and Carbon Inventory. A methodology for the development of the pilot phase of the inventory incorporating spreadsheets with environmental and socioeconomic criteria was consolidated. It is currently undergoing field testing with support from INFONA and SEAM technical staff. The development of guidelines for the use of environmental and socioeconomic spreadsheets is pending. Maps of forest cover and non-forest cover which are in the process of being reviewed by the National Technical Team were drawn up. National technical experts attended two training sessions on allometric equations. Quantitative information concerning this point is expanded in component 4.a.4

Additional activities are still required to facilitate the country's REDD+ readiness process and these should be implemented synergistically by UN-REDD FCPF and other initiatives linked to REDD+ supplementing the activities already developed.



1.b.2 Identification of relevant stakeholders

The aim is to ensure the involvement and participation of stakeholders and other groups having an interest in forests, as well as the establishment of effective mechanisms for coordination between sectors and levels of government in the preparation and implementation of the National REDD+ Strategy.

An effective consultation and participation process is one that has been carefully planned and has defined objectives. The Stakeholder Involvement Strategy will promote an open and transparent process to ensure the effective participation of all stakeholders. To this end five categories of stakeholders are considered. These stakeholders include many public institutions, for-profit private organizations, peasant farmers and indigenous organizations converge. The categories are:

Table No. 2 Criteria for Stakeholder Engagement

Criterion for Selecting Stakeholders	Stakeholder Group	Definition	Stakeholders
1	Those who have recognized rights over the forest resources or services	Customary rights; Rights of possession; Rights legally acquired through administrative procedures	Indigenous Peoples Peasant Farmers Organizations Private Owners
2	Those with expertise in governance and control over forests and their goods and services	Legislative authority for granting of rights Regulators of rights granted Manager of resources. Policymaking bodies	INFONA SEAM Municipalities Governorships National Congress
3	Agents and drivers of deforestation, of forests [sic]	Agents that directly affect the loss and/or degradation of forests. Drivers that indirectly affect the loss and/or degradation of forests	The Paraguayan Production Guild Union [<i>Unión de Gremios de la Producción</i>] Paraguay Rural Association The Paraguayan Federation of Lumbermen
4	Existing spaces for dialogue	Mechanisms for dialogue and participation with the common goal of forest conservation	National Environment Council Forestry Advisory Council National Climate Change Commission [<i>Comisión Nacional de Cambio Climático</i>] National Commission for Protection of Natural Resources, National Congress [<i>Comisión Nacional de Defensa de los Recursos Naturales, Congreso Nacional</i>] NGO Networks Networks of Indigenous Organizations Rural Network
5	Stakeholders involved (including in REDD+ Forestry Programs and Projects)	Designers and implementers of Forestry Programs and Projects and REDD+	National University of Asunción NGO Networks Private Sector Investors State-owned banks Private Banking Sector International Organizations International Cooperation



1.b.3. Actions defined to provide sustainability of information exchange and dialogue with the main stakeholder groups; activities prior to the consultation process

The actual process of sharing REDD+-related issues started as early as 2008 with the presentation of the R-PIN, a process that was opposed by certain civil society and indigenous organizations for a lack of depth in the issues associated with the participation of indigenous peoples in the actual REDD+ process. A process to ensure the effective exchange of information on the scope and objectives of the REDD+-related initiatives (UN-REDD and FCPF), in which the country, through its environmental authority, sought to participate was launched in November 2008.

In early 2009, the process of preparing the UNREDD-NJP commenced and, thereafter, information workshops have been held for the various stakeholders involved in REDD+-related issues, particularly indigenous peoples of different communities and associations in the different regions of the country. This process was conducted until November 2010, when a consensus-based and agreed-upon proposal was presented before the UN-REDD Policy Board, which served as a learning process for both indigenous organizations and government institutions that participated in the process of consensus building.

It is noteworthy that in the UNREDD-NJP document a chapter developed entirely by the Federation for the Self-Determination of Indigenous Peoples (FAPI) has been included, in which guidelines for the implementation of the National Joint Program in Indigenous Peoples' Territories are established and an annex into which a Proposed Protocol for a Consultation and Consent Process with the Indigenous Peoples of Paraguay is integrated. This Document is attached in the Annexes.

At the same time, in the context of other initiatives related to the issue of climate change implemented by the Environment Secretariat, such as the UNDP Regional Climate Policy Project and the UNDP Global Initiative on Capacity Building for Decision-Makers, have carried out training linked to general aspects of climate change, including everything related to REDD+, from 2010 to date.

From the implementation of the **UNREDD-NJP activities in 2012** sharing and awareness-building workshops aimed at indigenous communities, local governments, municipalities and other relevant stakeholders in the territories began with the objective of providing knowledge in order to make their involvement in the REDD+ Plan preparation processes effective.

Among other specific objectives, the workshops/trainings have targeted the following aspects:

- Provide timely and accurate information on climate change
- Raise awareness of the importance of forests for the protection of biodiversity and climate regulation



- Strengthen capacities of the public in general, particularly peasant farmer populations and indigenous communities, with the aim of generating trainers
- Report on existing mechanisms for mitigation and adaptation, including aspects related to REDD+

It is noteworthy that in the workshops conducted there was a higher requirement on the dissemination of information related to climate change and in particular relating to REDD+. The information must be provided in plain language, with clear examples addressing the following topics that have been identified as major issues:

- The climate change problem at the local level, including aspects related to public health, deforestation, and water resources
- Partnerships needed locally to address climate change and aspects related to deforestation in their territories
- Education as a key component of efforts to address climate change and aspects related to deforestation, particularly with respect to REDD+
- How the initiatives related to REDD+ could help in the preparation of National Development Plans
- Creation of local groups for discussion related to climate change and all its aspects including the issue of REDD+, move the discussions to the municipalities

Taking into account the lessons learned in implementing the UNREDD-NJP, mechanisms to encourage greater involvement of women, youth and peasant farmers' organizations will be strengthened so that all stakeholder groups are represented in the preparation of the National REDD+ Strategy.

For this reason, it is important to outline a strategy that takes appropriate steps to ensure the involvement of all relevant stakeholders, ensuring the exchange of information and timely dialogue.



Table No. 3 Awareness-Raising Workshops with Indigenous Peoples 2012

Organization/Community	Place/Conference	August				September				October				November				December				Number of Participants according to sex					
		1s	2s	3s	4s	1s	2s	3s	4s	1s	2s	3s	4s	1s	2s	3s	4s	1s	2s	3s	4s	Mas	Fem	Total			
Community Chaidi	Filadelfia - Dpt. Alto Paraguayo, OPIT Meeting 23-25 Aug.																								29	4	33
Community Jaguary	Juan E. Estigarribia - Caaguazú - Org. Cheiro Ara Poty Sept. 28																								40	20	60
Organization (FRICC)	Filadelfia - Boquerón - Chaco Colonia Yalve Sanga Oct. 10																								48	10	58
Ka'avy Pa'u Community	Caazapá - Tava'i District Nov. 20																								45	30	75
Mbo'i Ka'e Community	Itapuá - Pirapó District Nov. 7																								32	13	45
Yasuca Venda Community	Amambay - Captan. Bado District Nov. 29																								49	28	77
Total participants in the different workshops																					243	105	348				

1. b. 4. Abordaje Nacional de la Propuesta Protocolo para el consentimiento Previo Libre e Informado (CPLI)

Como parte del documento firmado por el Gobierno de la República del Paraguay, para la implementación del Programa Nacional Conjunto ONU-REDD, se encuentra la propuesta elaborada por la FAPI de un Protocolo para el Consentimiento Previo Libre e Informado.

A fin de iniciar el proceso de consensuar esta propuesta de Protocolo, en forma conjunta con el Instituto Paraguayo del Indígena y el PNC ONUREDD representado por la FAPI, se realizó en agosto del 2014, "El Primer Taller de Organizaciones Indígenas de Paraguay para la construcción de un protocolo de Consulta y Consentimiento, libre, previo e informado", el cual contó con la participación de más de 30 organizaciones indígenas. En el mismo, se ha constituido un Equipo de Trabajo con representantes las organizaciones indígenas con el acompañamiento del INDI.

Este proceso ha concluido en octubre del 2014, con un proyecto de ley consensuado sobre Consulta y Consentimiento libre, previo e informado, el cual ha sido entregado a INDI para ser presentado al Poder Legislativo para su promulgación durante el 2015.



Asimismo, se planea acudir a este protocolo sobre consulta y consentimiento previo libre e informado al momento de analizar potenciales opciones estratégicas para reducir la deforestación y degradación en Paraguay, y aumentar los reservorios de carbono, que podrían tener impactos, sean positivos o negativos, sobre grupos indígenas a nivel local. Por lo tanto, se requiere primero identificar y priorizar estas opciones estratégicas, que incluirán probablemente políticas y medidas diferenciadas para las zonas orientales y occidentales del país, antes de saber si y cuando se usaran estos protocolos de consultas y consentimiento.

1. b.5 The gender perspective

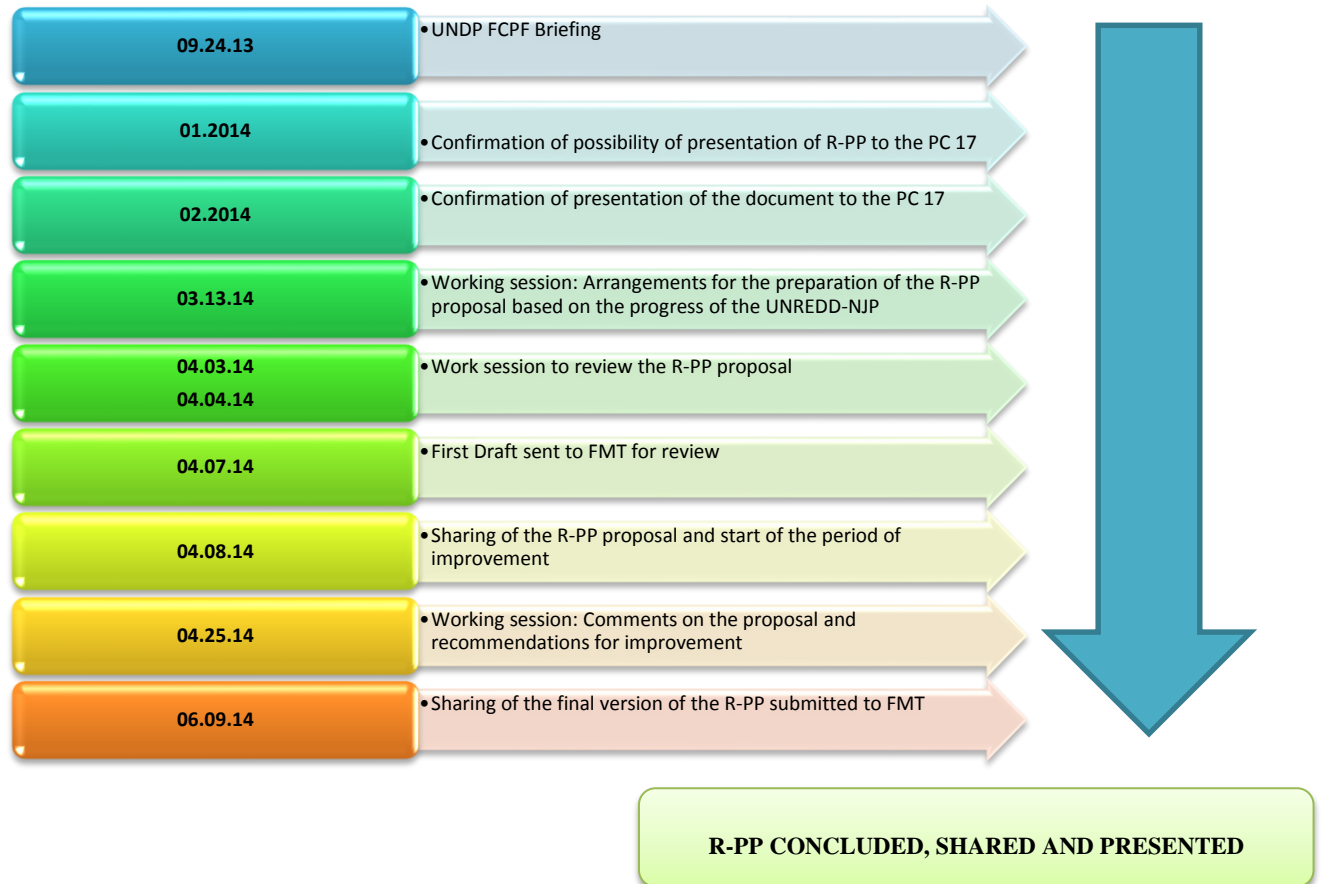
The gender perspective will be considered in all the various stages of REDD+ implementation. In that regard, the planning and monitoring bodies will encourage mainstreaming of the gender perspective, giving due respect to the cultures of the different groups involved. Furthermore, research, consultations, surveys, and other sources will include disaggregated data by sex and age that can be used in the development of policies, strategies, methodologies, plans and procedures. The participation of women (and their organizations) will also be encouraged at all opportunities generated by the project and will effectively contribute to their empowerment as social actors, respecting the cultures of the different groups involved.

1. b.6 Sharing and participation plan for the R-PP

The objective of this process is to enable relevant stakeholders to participate in the formulation of the document.

Accordingly, the following process has been developed:

Chart No. 3: Plan for Preparing and Sharing the R-PP Document



With this in mind, the following activities were carried out:

- Work sessions with key national stakeholders for the preparation of the R-PP, SEAM, INFONA, the Technical Planning Secretariat (STP) and others - 4 sessions March, April, 2014
- Circulation of the R-PP to the key stakeholders who participated in the briefing, so that they can familiarize themselves with the structure of the R-PP document and have time to prepare their inputs to the process of improving the document. April-May 2014
- Dissemination of the R-PP process and improving of the document, among the actors that have to be involved in REDD+ readiness efforts, including: local governments, Ministries of Agriculture and Livestock, the National Forestry Institute, public works, planning/finance, energy, NGOs, universities, Paraguay Indigenous Peoples' Institute, and other forest communities, peasant farmers, private sector, projects and related initiatives - April 2014.

Topics covered in the sessions organized to review and improve the document:



- a. Presentation of the preparation work for REDD+ and the final version of the R-PP
- b. Discussion and receipt of all comments and suggestions, component by component
- c. Presentation of the outcome framework
 - a. Identification of actors who would like to receive information about the REDD+ readiness process in general and according to specific topics, as well as channels of communication;
 - b. Identification of potential stakeholders receiving training in the REDD+ readiness process in general and according to specific topics, how, when, and with whom;
 - c. Identification of stakeholders who would like to participate in the various REDD+ readiness tasks, how, when and under what conditions;
 - d. Identification of implementation arrangements: a review of the proposed structure for the REDD+ National Committee; what are the roles and responsibilities of the different participants: UN, government, representatives of indigenous peoples, other communities and civil society; what happens in case of non-compliance; and
 - e. Identification of how the observance of the rights of indigenous peoples and other communities have been and will be respected during implementation.

The matrix presented in the document will be improved based on the comments to be received on the R-PP, the proposed stakeholder engagement strategy, and the outcome framework.

The minutes of the work sessions, the photographic record, and list of participants are included in Annex 3.

Budget 1b. Initial information sharing and dialogue with key stakeholder groups						
Activity	Sub-activity	Estimated costs in thousands of US\$				
		2015	2016	2017	2018	Total
Early dialogue with key sectors	Development of roadmaps, agriculture (family farming, soy, sugar)	20	10	10	5	45
	Development of roadmap with the livestock sector	20	10	5	5	40
	Development of roadmap forest sector/management and reforestation	20	10	10	5	45
	Developing of roadmap with energy and infrastructure	20	10	5	5	40
Communication Strategy and positioning of the Paraguay REDD+ Program	Development and implementation of the Communication Strategy	50	10	10	10	80
Total		130	50	40	30	250
Government		10	10	5	5	30
FCPF		60	40	35	25	160
UN-REDD		60				60



1c. Consultation and Participation Process

Standard 1c the R-PP text needs to meet for this component: Consultation and Participation Process

Ownership, transparency, and dissemination of the R-PP by the government and relevant stakeholders, and inclusiveness of effective and informed consultation and participation by relevant stakeholders, will be assessed by whether proposals and or documentation on the following are included in the R-PP (i) the consultation and participation process for R-PP development thus far (ii) the extent of ownership within government and national stakeholder community; (iii) the Consultation and Participation Plan for the R-PP implementation phase (iv) concerns expressed and recommendations of relevant stakeholders, and a process for their consideration, and/or expressions of their support for the R-PP; (v) and mechanisms for addressing grievances regarding consultation and participation in the REDD-plus process, and for conflict resolution and redress of grievances.

1. c.1 Consultation and Participation Plan for implementation

The **main objective** of the Consultation and Participation Plan (CPP) is to extend the initial consultation process for all the components of REDD+ readiness and establish agreements and consensus for the continuous process of information and feedback with stakeholders and interested parties during implementation of the R-PP.

The **National REDD+ Strategy** preparation process will be based on the guidelines of Appendix I of the Cancun Agreements (Decision 1/CP.16), in relation to the following safeguards: (a) That actions complement or are consistent with the objectives of national forest programs and relevant international conventions and agreements; (b) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty; (c) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples; (d) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities; (e) That actions are consistent with the conservation of natural forests and biological diversity, the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits; (f) Actions to address the risks of reversals; (g) Actions to reduce displacement of emissions.

Furthermore, with regard to indigenous peoples and communities the Guidelines of the Federation for the Self-Determination of Indigenous Peoples (FAPI) for the implementation of the National Joint Program in Indigenous Territories (UN-REDD) and the Draft Protocol for a Consultation and Consent Process with the Indigenous Peoples of Paraguay. The UN-



REDD Program Guidelines on Free, Prior and Informed Consent and the Legal Companion to the UN-REDD Program Guidelines on Free, Prior and Informed Consent (FPIC) - International Law and Jurisprudence Affirming the Requirement of FPIC shall also be used.

1.c.2 Specific objectives

The CCP will be carried out during the early implementation of the R-PP to achieve the following specific objectives:

- a. Ensure that all relevant actors and stakeholder groups have an adequate knowledge and understanding of REDD+ issues and the objectives of the readiness process.
- b. Promote effective participation of stakeholders in readiness activities and capacity creation and building among all of them to ensure their participation in future REDD+ activities
- c. Ensure the inclusion of all stakeholders in the design and implementation of the REDD+ process at all geographic levels (national, departmental, municipal), in an open, participatory, and transparent manner
- d. Integrate the views and concerns of stakeholders in decision making, promoting dialogue and consensus among actors with competing interests
- e. Create broad support for REDD+ readiness
- f. Promote and ensure equitable participation in REDD+ policies and activities for the different stakeholders, with particular emphasis on indigenous peoples and other vulnerable forest-dependent populations
- g. Facilitate assessment of the environmental and social impacts of the REDD+ process, and especially the potential adverse impacts on the livelihoods of the relevant actors, including in particular indigenous peoples and communities, small farmers, and the mitigation thereof, with particular attention being paid to the role of gender and empowerment of women and youth

The plan will follow as basic principles the guidelines set out below and will be built on the actions already undertaken under the UNREDD-NJP:

1. The need to share detailed information and carry out a series of awareness-building activities before the actual consultation
2. Definition of the desired outcomes of the consultations
3. Clear and detailed identification of the parties interested in forests, who may possibly be affected by REDD+ activities
4. Application of a participatory approach to include information on decision making. Transparency must be ensured not only in decisions adopted but in how those decisions incorporate the outcome of the consultation process
5. Active participation and leadership of stakeholders in the implementation of the CPP
6. Equitable sharing of benefits, certainty and respect for the property rights of citizens and landowners
7. Integration of the consultation process with the development of social and environmental safeguards, human rights, and the National Safeguards Monitoring System



8. Definition of priorities and specific aspects on which to have consultation at every stage of the readiness process
9. Ensuring that stakeholders have sufficient capacity to participate fully and effectively in the consultations
10. Organization of consultations with the relevant stakeholders at different levels within the community and organizations
11. Wide dissemination and discussion of the results, ensuring they are communicated to all actors involved in the process

1. c.3 Methodologies and content of the Consultation and Participation Process in general

To effectively implement the CPP, tools will be used to ensure broad and effective engagement during the process, which will be suitable for stakeholder groups who will be involved, paying particular attention to cultural diversity. Such tools include:

1. Dissemination of information and awareness building among focus groups, including guides and manuals, explanatory booklets that explain in simple and accessible language the guidelines of the Plan, informative audio and video materials, PowerPoint presentations and flipcharts, in the official languages and indigenous languages to be specified.
2. In order to ensure the effective use of these accessibility tools, the following activities shall be carried out:
 - a. Disseminate information through the websites of national agencies, regional authorities and NGOs
 - b. Develop a web site to show the status and progress of the REDD+ process in Paraguay and can receive data and input. Every communication received shall be acknowledged. Similarly, the comments received from the different stakeholders shall be organized based on the formats designed for this purpose
 - c. Post the REDD+ Bulletin and periodic reports for groups of different stakeholders
 - d. Create audiovisual and graphic material for education and publicity such as posters, flipcharts
 - e. Organize workshops for media and journalists
 - f. Broadcast messages via community radio, in Spanish and Guaraní
 - g. Use mobile technology (SMS) and posters etc.

The publicity materials will target different audiences: (a) the general public, (b) stakeholders without deep technical knowledge, (c) specific stakeholder groups that require detailed technical information, (d) indigenous peoples and communities, (e) youth and young women's groups, (f) small farmer groups, (g) the productive sector, and (h) the financial sector.



1.c.4 Materials, and consultation and participation meetings, including:

- a. Bilateral consultations consistent with the standards framed in international law with relevant stakeholders on specific issues related to the implementation of the R-PP, referring to property and land tenure and territorial disputes. Delivery of benefits in and among indigenous peoples and communities following the procedure established by the NJP
- b. Consultations on disputes with small producers and peasant farmers
- c. Interviews with key national, and where necessary international, experts
- d. Multi-sectoral workshops with stakeholders
- e. Online surveys
- f. Consultations on specific topics
- g. Public surveys
- h. Consultations on outreach programs and projects such as agricultural and forestry outreach programs of national scope under the Ministry of Agriculture and the National Forestry Institute
- i. Visits and interviews with indigenous communities always within the process outlined by the framework established at the beginning of this list
- j. Visits and interviews with peasant farmers' organizations, including women's groups

Priority issues on which information is required to be communicated prior to consultation are as follows:

1. Basic Information on REDD+, forestry and the UNFCCC process
2. REDD+ in the context of land use policies in Paraguay
3. Objectives, components, and R-PP activities
4. Approaches and methodologies of the CPP and options for stakeholder participation
5. The potential benefits and risks of REDD+ implementation.
6. Potential activities and options for REDD+
7. Mechanisms for delivery of benefits
8. REDD+ in relation to the gender issue and the need for equitable costs and benefits
9. Problems that may arise related to the rights of Indigenous Peoples
10. Specific problems with small farmers. The legal implications of REDD+
11. Land tenure systems
12. The national outcomes of REDD+ in the international context
13. The direct and indirect causes of deforestation and forest degradation
14. The design of the MRV system and the effective participation of stakeholders
15. Potential risks and environmental and social safeguards

The content of the consultations will be adapted to the relevant target group, paying particular attention to the process established for indigenous peoples. An information package will be provided to representatives of organizations, stakeholders and communities to be consulted. This package will consist of a reference guide and a form on which to make comments and suggestions. All comments and suggestions received from stakeholders will be compiled and presented in the consultation workshops and will be considered.



1.c.5 Proposal for the phased implementation of the consultation process

The CPP will be linked directly with the **National REDD+ platform** and will be implemented in three phases, based on the work and the lessons learned from UNREDD-NJP:

PHASE 1: Dissemination of information, training and design of the consultation process (Information and Communication Strategy): The main objectives of this phase are to (a) provide general information on REDD+, the readiness process, readiness activities and application options; (b) identify and involve a wide range of stakeholders, including local actors and indigenous peoples/communities, the productive sector, peasant farmers, women's organizations, NGOs, the private sector, and youth; (c) prepare the pilot consultation activities; (d) consult on the content and design of the consultation and participation activities; (e) strengthen the capacity of stakeholders to participate effectively and participate in the REDD+ readiness process; and (f) define the rules of procedure for the REDD institutional system.

The main objective of this stage will be to provide relevant and effective information to a wide range of stakeholders so that they are informed and have the ability to understand and work on REDD+ issues. Moreover, the establishment and strengthening of the functions of the REDD institutional system will be a major objective of this phase. Effective capacity of the organizations involved in the consultation process must be achieved at the end of this phase.

PHASE 2: Pilot testing and validation of the CPP (consultation and participation process): The general objectives of this phase are to (a) reach an assessment of the relevance and effectiveness of the approach and the tools used according to the outcomes obtained by carrying out a pilot test of the CPP process in a given territory with a special focus on participation and capacity building, (b) make recommendations and incorporate the feedback into the final design of the CPP, and (c) validate the final design of the CPP and its tie-in with the structures that have been discussed in component 1a. During this phase it is expected that the REDD institutional system will involve local stakeholders and identify development partners. Consultation activities will focus on options for the REDD+ strategy in multi-sector workshops with stakeholders.

It should be noted that in specific cases it is spelled out that not only will consultation be required but in appropriate cases the free, prior and informed consent of indigenous peoples and communities must be obtained when their territory and/or other collective right is involved.

The specific objectives of this phase are to:



- Identify local stakeholders, i.e. groups and organizations that may be affected or interested in the problem (authorities, formal or informal leaders, the private sector, NGOs, etc.)
- Report in a timely and readily understandable manner to people on the proposals, ongoing activities, alternatives considered and their possible impact on their lives and activities, particularly as regards communities and forest dwellers
- Based on the information about the activities taking place in the area, obtain authorization from the local authorities and the individuals concerned in order to carry them out
- Give stakeholders the ability and opportunity to express their concerns, identifying the conditions, benefits and risks of each alternative and, if necessary, propose alternative approaches
- Respond to the concerns, ideas and proposals submitted
- Respect the individual and collective rights of indigenous peoples and communities
- Understand the needs, concerns and values of each of the communities or interest groups, to reach appropriate decisions

The proposed process shall ensure:

- That all stakeholders have the opportunity to participate in the decision-making process;
- That decisions take into account the effect on their needs, aspirations and concerns; and
- That decisions on the alternatives considered are conducted in a transparent manner in order to build the trust and support of the stakeholders.

1. c.6 Methodology

1) Identification of issues, local actors and preliminary assessment.

The consultation and communication strategy will be based on a clear understanding of the expectations and needs of stakeholders. Identification and preliminary assessment of the key issues to be addressed through the consultation process will be used to build the socioeconomic context of the REDD+ strategy, provide on a preliminary basis information on the needs and expectations of the community about the problem, and identify the opportunities and constraints of the process.

The identification of the key social actors begins at the commencement of the consultation activities. Through this process, an inclusive and flexible attitude will be developed in identifying stakeholders, ensuring that the process reflects the diverse needs of the stakeholders at various stages of the process.

These activities will be coordinated with local authorities and other stakeholders in order to identify:

- The needs, concerns and expectations of local actors;
- The social, political, and economic role of the actors in the region;



- Communication tools and methodologies;
- Potential conflicts between the alternatives considered and the needs and interests of local actors; and
- Opportunities for stakeholder participation

During this and the next phase a mechanism for receiving complaints and disputes will be implemented and may be applied to the management of disputes, depending on the case and phase. The mechanism will consist minimally of an e-mail address, suggestion boxes, or special telephone lines in order to hear about specific concerns, or institutions with moral integrity that are trustworthy to the stakeholders. Complaints may also be heard at planned meetings and workshops, and at thematic and other consultations. The mechanism will be the responsibility of the person designated for this purpose. For those cases that require a more complex intervention because of the conflict in question, the Ombudsman will be notified.

As a result of this activity there will be:

- A report on the main issues of interest to the local community, which must be addressed;
- A preliminary map of the local actors and their interests; potential disputes, and identification of commitments for effective participation in the consultation and dissemination process;
- A prior consultation strategy reflecting different levels of participation and information needs of the different groups; and
- An updated electronic database of local actors, including their profiles, attitudes, and interests.

The main result of this phase will be the lesson learned in achieving full implementation of the CPP at the local level and validation and adjustment of the design of the CPP.

PHASE 3: National Consultation - Plenary Session

The main objectives of this phase are to (a) carry out the CPP at all eco-regional levels; (b) establish a sustainable institutional framework for consultation with all stakeholders and effective participation in REDD+ readiness and the implementation process; (c) seek the views of all relevant stakeholders; (d) identify the risks and opportunities of the various REDD+ strategies, taking into consideration the circumstances of each region; and (e) integrate consultation with ESMF activities.

During this phase, a validated framework for consultation and participation taking into account the experience of phases 1 and 2 shall apply, making sure that specific laws and procedures are applied when involving indigenous peoples and communities.

Someone will be appointed to be in charge of the process and shall be sure to maintain the feedback mechanism with the other areas managing the preparation.



1.c.7 Priority activities for the establishment of the consultation plan

Thus, based on an intercultural, interinstitutional and intersectoral dialogue at different levels, and applying the principles of participation of the major groups, and understanding that each actor plays a strategic role according to interests, roles and responsibilities, instruments, entities, and mechanisms for sharing and participation appropriate to each context have been identified to delineate the basic aspects for REDD+ readiness.

1. Adaptation of the results of the stakeholder map for REDD+. The consultation process will introduce new actors involved directly and indirectly in REDD+. Thus, these new actors along with the previously identified actors will be incorporated.
2. Identification of existing consultation structure: among stakeholders directly and indirectly involved in REDD+ there are social governing rules in which there are existing mechanisms for consultation among members, such as general meetings. However, it is necessary to make a preliminary identification of these existing mechanisms to avoid duplication or even conflict between the standards prevailing in the organization of the stakeholders.

According to the stakeholder group to be consulted, the process shall have the following key assumptions:



Table No. 4 Assumptions for Consultations with Stakeholders

Stakeholders	Actions necessary	Methodology	Language
<p>Indigenous Peoples; In specific cases their free, prior, and informed consent will be necessary (FPIC)</p>	<p>Full implementation of ILO Convention 169 ratified by Law 234/93 of Paraguay and the United Nations Declaration on the Rights of Indigenous Peoples by the U.N. Joint UN-REDD FCPF Guidelines, Guidelines for the implementation of the UN-REDD National Joint Program in Indigenous Peoples' Territories, the Protocol for a Consultation and Consent Process with the Indigenous Peoples of Paraguay prepared by the Federation for the Self-Determination of Indigenous Peoples</p>	<p>Technical reports of the consultation process will be drawn up: in each of the consultations carried out there will be a technical report of the points discussed and agreed on in the consultation activities. In cases where fundamental rights are involved it is necessary to have FPIC</p>	<p>Communication, publications and translation In addition, the work carried out in the implementation phase of the consultation plan will be disseminated and agreed on with the communities and peoples, the official languages of Paraguay (Spanish and Guaraní) for the dissemination of the material will be taken into account and if possible it will be translated into other languages. Deadlines, persons involved and consultation processes will be agreed on through amicable negotiations based on international principles and norms.</p>
<p>Civil society</p>	<p>Process implemented immediately and continuously so that the necessary skills are generated for an effective involvement of civil society</p>	<p>At regional and local levels, events, meetings and workshops with the stakeholder groups identified to give more details on the information provided and exchanged in early dialogue meetings on key issues previously indicated are held. Likewise, in these workshops it is expected that interlocutors will be designated by type of stakeholder and subregional geographic areas for participation in the</p>	<p>This information will be disseminated through different mechanisms and forums, in keeping with the Communications Strategy. Thus, it will be disseminated nationally through the website, radio programs and REDD+ electronic newsletters; likewise, there will be participation in academic or information events that will disseminate the information to different stakeholders</p>



		<p>relevant regional workshop based on the proposals made in each workshop depending on community dynamics and geographical conditions.</p> <p>Through these interlocutors it is hoped to: Collect the proposals, questions and concerns of grassroots communities during the process of preparing the REDD+ Plan</p> <p>Arrange for convening of the meeting and the activities planned at the local/regional/national level</p>	
Family Farming	<p>All stakeholder groups that have been identified as stakeholders directly or indirectly linked to REDD+, according to their interest in the subject, will be encouraged to participate.</p>	<p>During the initial implementation phase the RPP will be put together in a participatory manner the schedule to be implemented supplementing the activities already carried out by the UNREDD-NJP</p>	<p>All activities proposed in the consultation process for all stakeholders will be conducted in Spanish and Guaraní as the official languages of the country</p>
Producer Organizations			
Youth and women's organizations			

1.c.8 Dispute Resolution Mechanism

Aspects linked to a dispute resolution mechanism are detailed in **component 1.a**. Please refer to that section.

1.c.9 Transparency and Accountability of the Consultation Formulation and Implementation Process

The results of consultations will be shared through the media and instruments that will form part of the communication platform that will be built during the readiness phase. This platform may include radio stations, television, print media, newsletters, electronic media, web portals, etc., at local, departmental and national level. It will also involve mass media and alternative communication channels, especially those that contribute to shaping public opinion and public awareness.



In addition, information shall be flexible, adaptable and in accordance with the characteristics of each of the regional groups. The information will also be available in the country's official languages (Spanish and Guaraní), providing basic information, where possible, in native languages of the indigenous communities.

An alliance with institutional experts in social communication is planned in order to assess the most effective channels and means to reach the largest number of stakeholders and the society in general, and to plan in more detail the dissemination of information on the consultations.

One of the main objectives of this platform is to obtain feedback on the results of the consultation process and to formulate the strategy; this information will be incorporated into the process of implementing the National REDD+ Strategy.

A mechanism will be established to ensure transparency, accountability, and sharing of the consultation and participation process, from the formulation of the mechanism to the results obtained from consultations. The mechanism will be based on the Law on Access to Public Information, as discussed in component 1.a., establishing itself as an area of central importance for managing the preparation.

In addition, and based on the creation of the national system of safeguards, regional roundtables assigned according to the most relevant interest groups will be established for the purpose of optimizing and obtaining more detail from the process.

Interviews, workshops, meetings, focus groups, and academic forums and events will be conducted at the national level and in all regions. Mainly, the following activities will take place:

- Technical interviews and roundtable discussions with institutions and sector guilds at the national level (agriculture, economy, infrastructure, industry) to identify barriers or gaps in sectoral standards and adequacy requirements.
- Focus groups and formation of regional sectoral roundtable discussions on REDD+ will be held to identify regional sectoral plans and coordinate with the REDD+ Strategy.
- Forums with regional experts on forests, environmental services, drivers of deforestation and mitigation options as input for the design of the regional plans.

Regarding indigenous peoples and communities the cooperation of national and/or international experts will be sought to support the consultation process in good faith, and through their representative bodies for effective participation and in cases where their free, prior, and informed consent is required.

1.c.10 Progress achieved nationally under the UNREDD-NJP, to May 2014

- Safeguards, National Grievance and Dispute Resolution Mechanism: In April 2013, as part of the international workshop on environmental, social, and human rights safeguards that included the participation of over 100 representatives from all sectors of the society



two workshops were held, one on safeguards and the other on dispute resolution, which would provide feedback on the process of preparing the National REDD+ Strategy. A national workshop on Free, Prior, and Informed Consent is expected to take place in the second half of 2014, in preparation for the FPIC Regional Workshop.

- **Participation of the private sector in REDD+:** In the second half of 2013, a process of dialogue with private stakeholders interested in REDD+ was started. A regional workshop was organized in Latin America in August 2013 on the role of the private sector in the implementation and financing of REDD+, which was attended by representatives of the National Program and FAPI who presented the development of the National Program to international investors, development bankers, and project implementers. Program representatives received recommendations on the enabling conditions being sought by the private sector in order to invest in or develop REDD+ activities. A workshop with the private and financial sector will be held in Asuncion next June. Likewise, the development of the National Program was presented to the Roundtable on Sustainable Finance in November 2013 to explore the possibility of integrating this roundtable into the national REDD+ process and of its involvement in a potential market for certificates of environmental services and linkage to financial products being developed. Links were established with the Development Finance Agency and discussions were commenced with the Ministry of Finance.
- **Visit to indigenous communities:** In February 2013, FAPI visited the indigenous community of Chaidi, the Ayoreo Totobiegosode tribe in the department of Alto Paraguay, and the Tapy Kanguekua - Arroyo Moroti indigenous community, the Mbya People in the Department of Itapua; an interview was conducted with the community leader in order to publicize aspects of climate change and REDD. In August 2013 training of members of the Indigenous Leaders Organization of Bajo Chaco (CLIBCH) was carried out, which was attended by 10 leaders of communities to which this Committee is closely linked.
- **Participation of indigenous peoples:** members of the Board of FAPI, as well as representatives of other indigenous organizations that are not FAPI members participated in the various UNREDD-NJP activities including a workshop to teach and promote safeguards and presentation of the Proposed structure for the National REDD Committee (CONAREDD). On these occasions the leaders requested training for their communities, and the pertinent plan is now in the preparation stage.



Budget 1c: Participation and Consultation						
Main Activities	Sub-activities	Timeline and estimated costs in thousands of US\$				
		2015	2016	2017	2018	Total
Prepare a Consultation Plan on the REDD+ program of Paraguay according to stakeholders (In cases of indigenous peoples their free, prior, and informed consent will be sought)	Complete the Consultation Plan	30				30
	Capacity-building program	50	20	10		80
Implement the REDD+ Consultation Plan	Consultation Plan and implementation of corrections	20	10	10		40
	Sharing of the Consultation Plan	10	5	5		20
	Communication tools (videos, radio programs, brochures, flip charts)	30	20	10	10	70
	Implementation of the consultation plan		50	50	50	150
Design and implementation of regional and national communication strategies by sector	Sector: Indigenous, Production, Civil Society, Women, Peasant Farmers, and Youth	30	20	20	10	80
Total		170	125	105	70	470
Government		20	25	25	20	90
FCPF		100	100	80	50	330
UN-REDD		50				50



Component 2: Prepare the REDD-plus Strategy

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

**Standard 2a the R-PP text needs to meet for this component:
Assessment of Land Use, Land Use Change Drivers, Forest Law, Policy and
Governance:**

A completed assessment is presented that: identifies major land use trends; assesses direct and indirect deforestation and degradation drivers in the most relevant sectors in the context of REDD+; recognizes major land tenure and natural resource rights and relevant governance issues; documents past successes and failures in implementing policies or measures for addressing drivers of deforestation and forest degradation; identifies significant gaps, challenges, and opportunities to address REDD+; and sets the stage for development of the country's REDD strategy to directly address key land use change drivers.

2. a - The country scenario

2. a.1- The national territory

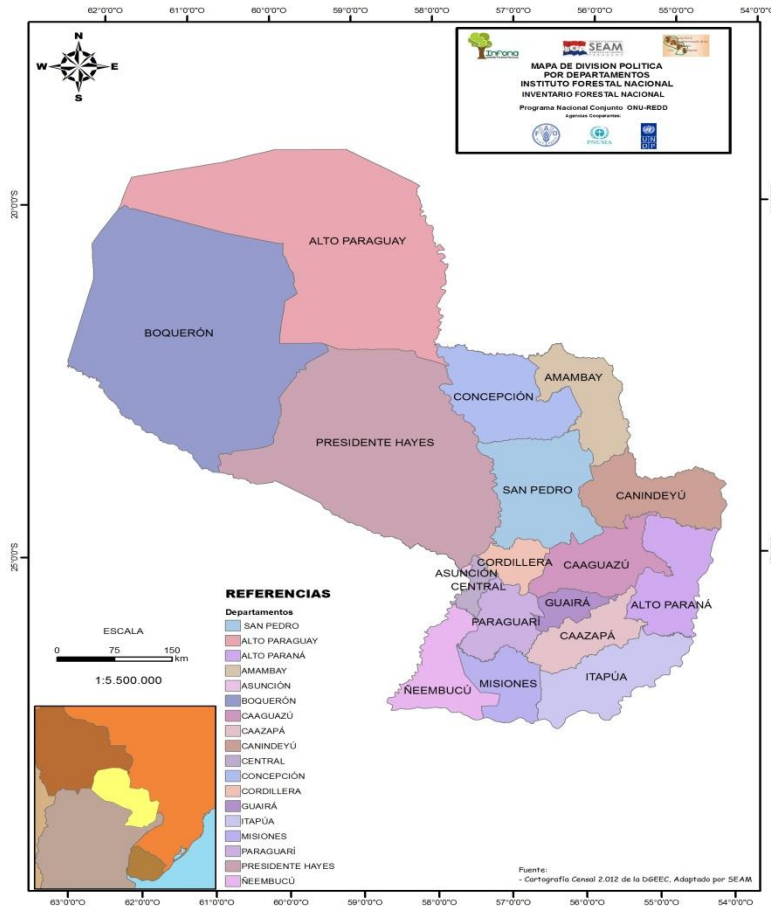
Paraguay is located in the center of South America and its landlocked status has significantly impacted not only its economic process but also its sociocultural setting, marked by its own unique and extraordinary features.

The country has a surface area of 406,752 km² and a total population of 6,273,103 inhabitants, and is bordered to the north by Bolivia, on the south and west by Argentina and on the east by Brazil. The territorial, political, and administrative system of the Republic comprises 17 departmental governorships and 225 municipal governments constituting local government bodies endowed with certain powers and levels of autonomy established in the Law for the fulfillment of its purposes.

From a physiographical standpoint, Paraguay is divided into two major natural regions: the eastern region and the western region (Chaco), each of which has markedly different features.



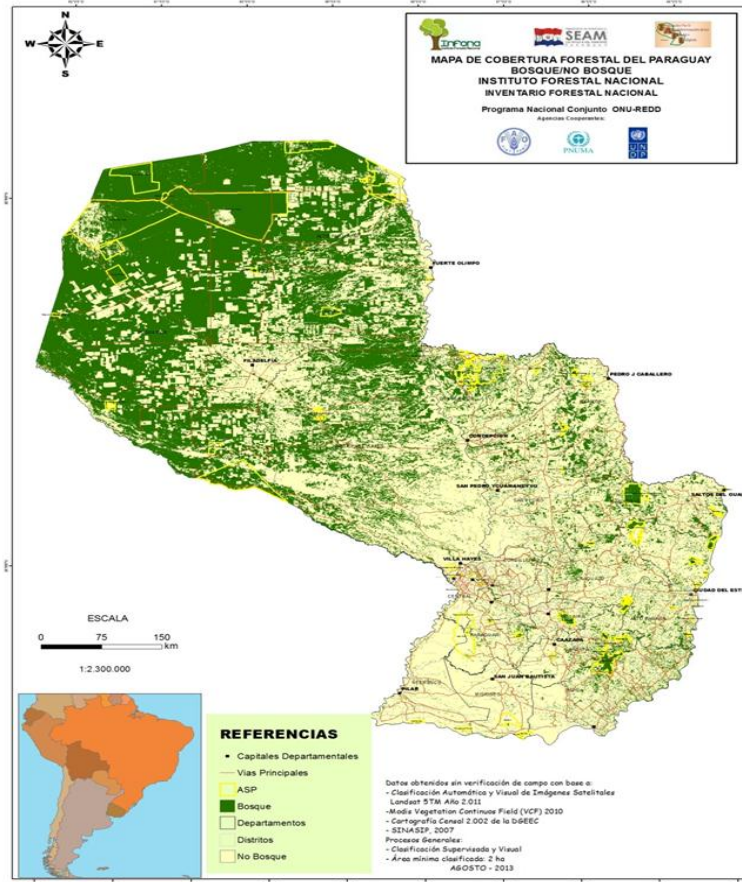
Map No. 1 Political Division of Paraguay



Current forest cover indicates that 84.3 percent of the forests are located in the western region and the remaining 15.69 percent in the eastern region.



Map No. 2 Forest Cover by Department and Region



2.a.2- Natural regions

2.a.2.1 - The western region

The Western Region or Chaco represents 60 percent of the national territory and is home to slightly over three percent of the population. This region is a vast plain of basically alluvial sedimentary formation characterized by a semi-arid to arid climate, with a rainfall gradient ranging from 1,000 mm in the Bajo Chaco in the south to 500 mm/year in the Alto Chaco or northern limit of the region.

The seasonal nature of the waterways that irrigate the region is associated with the rainfall pattern and the periodic runoff generated by the melting of snow from the Andes in Bolivia, which enters and spreads into the region from the northern boundary of the country, which briefly revives a variety of paleochannels, dead rivers, or marshes characteristic of the region.



From a biophysical standpoint, it presents particularly fragile ecological characteristics, susceptible to severe degradation because of the particularly intense, anthropogenic interventions of the past two decades, which generally deviate from the appropriate rules, expectations, and practices in the management of natural resources.

2. a.2. 2 - The eastern region

The eastern region, where the majority of the Paraguay's population resides (97 percent), comprises 40 percent of the country. This region forms a vast watershed system consisting of a very extensive system of rivers that irrigate the region, tributaries to the south-east of the Paraná River and west of the Paraguay River, which define the boundaries of the water system and the borders of the region. From a hydrogeological point of view, it contains a significant proportion of the Guaraní aquifer and its recharge areas, the largest freshwater reserve detected on earth.

From a geological standpoint, the Paraná River basin is largely an extension of the Brazilian basalt massif entering the region in varying extensions, up to roughly 80 kilometers, forming a variable topography and typical soil formations with predominance of red soils or latosols characteristic of the Paraná basin. It is broken by a central mountain watershed system with the Paraguay River basin.

The Paraguay River basin has a predominance of secondary geological formations; fragile, red-yellow podzolic soils that are erodible and subject to severe limitations in use; a more diverse ecological configuration and greater environmental fragility.

Unlike the Chaco, the climate of the eastern region is temperate to humid subtropical, with precipitation levels between 1,200 and 1,800 mm/year, with regular seasonal distribution.

Overall, from a biophysical point of view, the region has a mosaic of typical ecological formations ranging from forest ecosystems with diverse characteristics and composition, to wet alluvial grasslands and floodplains.

From the 1960s and 70s, the expansion of the agricultural frontier coupled with an intensive settlement process that was, from an economic perspective, essentially based on logging and extensive farming including pasture cultivation, generated drastic and extensive changes in land use, resulting in a significant reduction in and deterioration of the Alto Paraná Atlantic Forests, Paraguay's largest continuous forest formation, which has been reduced to small, degraded forest remnants, as well as the deterioration of the natural resources and loss of biodiversity.



2.a.3 - The population

According to the 2009 Continuing Survey of Households, the total population of the country is 6,273,103 inhabitants, of which 58.8 percent (3,689,006 inhabitants) live in urban areas, while 41.2 percent (2,584,097) inhabitants live in rural areas.

The last Agricultural Census, CAN 2008, reports on the significant reduction in the number of agricultural farms of less than 20 hectares in a context of polarization of land tenure, which underscores the trend and the structurally compact nature of the production model put in place.

In terms of age structure, the country has a predominantly young population considering that 59 percent is under the age of 30 and only seven percent belongs to the 65 and older age group. It should be noted in this regard that the concentration of young people occurs mainly in urban and peri-urban areas, while in rural areas the prevalence of older population is more evident according to CAN 2008 (this fact is based on population engaged in agricultural activities). The working age population comprising the population 10 years and older is 5,028,575 (80.2 percent), while the economically active population (EAP) amounts to 3,163,241 persons.

2.a.4 - Performance of the economy

Paraguay's small and open economy is heavily dependent on commodity exports, in particular soy and beef, which account for close to 50 percent of exports. However, poverty and inequality remain major development challenges, as one in three Paraguayans is poor and one in five lives in extreme poverty.

In terms of recent development, the Paraguayan economy has experienced high volatility in growth. Following economic growth of 4.3 percent in 2011, the severe drought in the first quarter of 2012 and the outbreak of foot and mouth disease in late 2012 brought about a decline in Gross Domestic Product (GDP) of close to 1.2 percent for that year.

Economic growth in 2013 exceeded 14 percent, representing the best performance achieved by the national economy, in the shaping of which the contribution of the agricultural sector plays a pivotal role.

The exploitation of natural resources in agricultural activities has expanded significantly in recent years, reaching 31,086,894 hectares, according to the National Agricultural Census, CAN 2008. The country lacks known or commercially exploitable oilfields and solid mineral deposits.

Similarly, it should be noted that the dynamics underlying growth in the agricultural sector is a mounting environmental cost, omitted both in the national accounts and in the conventional analysis of economic performance.



2.a.5 Performance of the agricultural sector

Considering the sector performance with the country's general economic growth reveals the strategic importance of the agricultural production complex. Although agricultural production is heavily concentrated in two categories, soy and beef, which account for about two-thirds of the sector's gross product and more than two thirds of the foreign exchange income, this is obviously linked to the fragility and structural exposure of the whole economy.

In the recent period the sector GDP remained at about 27 percent; while its participation in the employment of the economically active population (EAP) was about 30 percent, albeit with a slight declining trend.

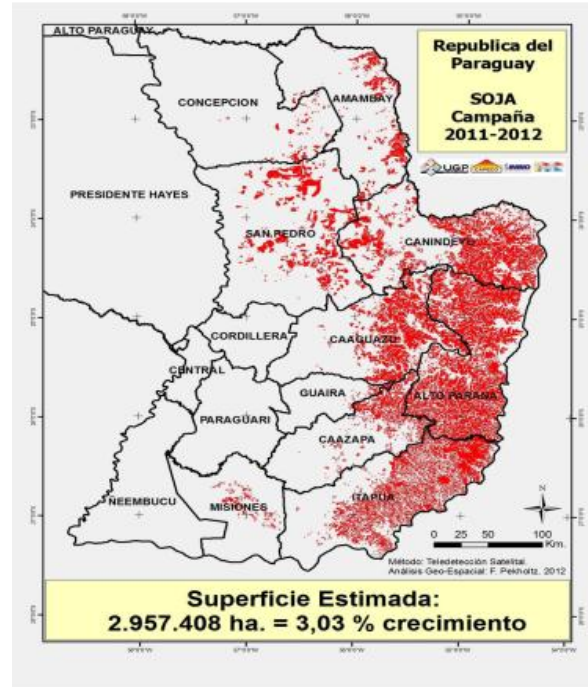
In terms of foreign exchange income, more than 75 percent of the income from the export of goods is generated by agricultural products and their derivatives. This sector is important because it is the major contributor to historic deforestation in Paraguay, so we shall now look at the characteristics of both sectors.

2.a.6 Soy production

Since the technological capacity for increasing the productivity of farm crops is still limited, production is increased by expanding the cultivated areas, so forests have been consistently destroyed to increase the country's agricultural production.

According to the National Agricultural Census for 2008, soy cultivation of 552,657 hectares in 1991 increased to 2,464,510 hectares in 2008, and more than 3,000,000 hectares in 2013. Much of the expansion has been at the expense of forests and this growth in the cultivated area coincides with the rates of deforestation during that period, as shown in the following map:

Map No. 3 - Expansion of Soy Production, Eastern Zone

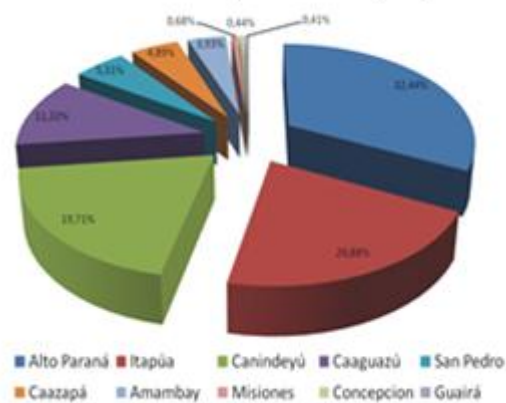


Source: Geo-spatial analysis by F. Petholtz

Chart No. 4 shows how soy production is distributed in the different departments of the country's eastern region, except for Ñeembucú, Cordillera, and Central whose arable soils are not used for soy production in significant quantities.

The annual growth in soya cultivation in the eastern region is closely related to the historic rates of deforestation, affecting primarily the Alto Paraná Atlantic Forest, which contains the country's best forests.

Chart No. 4
Volume of Soy Production by Department
Soy Production by department



Source: Report by Carlos Pegoraro (2008)

Table No. 5 shows the changes over the past 15 years in the area planted to soy, the volume of production, and the yield per hectare.

Table No. 5 Soy – Area Planted, Production, and Yield

YEAR	AREA PLANTED (HA.)	PRODUCTION (TONS)	YIELD (Kg/Ha.)
1998	1,150,000	2,988,291	2,598
1999	1,200,000	2,980,058	2,483
2000	1,200,000	2,911,423	2,426
2001	1,350,000	3,502,179	2,594
2002	1,445,000	3,546,674	2,454
2003	1,550,000	4,518,015	2,915
2004	1,936,600	3,911,415	2,020
2005	2,000,000	4,040,828	2,020
2006	2,426,000	3,641,186	1,501
2007	2,430,000	5,581,117	2,297
2008	2,644,856	5,968,085	2,256
2009	2,524,649	3,647,205	1,445
2010	2,680,182	6,462,429	2,411
2011	2,870,539	7,128,364	2,483
2012	2,957,408	4,043,039	1,367
2013	3,157,600	(*) 9,367,298	(*) 2,967

(*) Estimate. Source: CAPECO.



According to the source *USDA of November 2012*, Paraguay is the sixth-ranking soy producer in the world with nearly **9,000,000 tons** for the 2012–2013 harvest, and is the world’s fourth biggest soy exporter with **6,700,000 tons**.

However, it should be noted that the yield has not varied significantly.

Table No. 6 shows how soy exports have evolved since 1990 and how they are transported abroad.

Table No. 6 - Evolution of Soy Exports

YEAR	LAND	RIVER	RAIL	EXPORTS
	Tons	Tons	Tons	Tons
1990	633,798	571,795	354,304	1,559,897
1991	483,644	155,217	227,664	866,525
1992	367,749	265,684	198,452	831,885
1993	693,995	604,604	91,660	1,390,259
1994	635,649	428,192	110,920	1,174,761
1995	869,089	517,534	150,980	1,537,603
1996	721,129	713,045	153,254	1,587,428
1997	722,236	1,248,364	179,400	2,150,000
1998	430,746	1,743,440	119,409	2,293,601
1999	657,543	1,536,215	105,000	2,298,758
2000	784,482	1,113,850	111,220	2,025,552
2001	984,738	1,460,110	65,100	2,509,948
2002	1,155,776	1,216,615	5,000	2,385,979
2003	1,210,874	1,828,559	120,960	3,167,193
2004	351,906	2,152,152	149,309	2,664,415
2005	334,746	2,526,762	20,674	2,882,182
2006	31,986	2,227,727	120,631	2,380,344
2007	118,268	3,844,201	173,648	4,136,117
2008	97,560	4,242,351	98,174	4,438,085
2009	87,140	2,134,065	61,500	2,282,705
2010	107,605	4,492,824	54,000	4,654,429
2011	102,191	5,036,173	0	5,138,364
2012	199,116	2,771,923	0	2,971,039

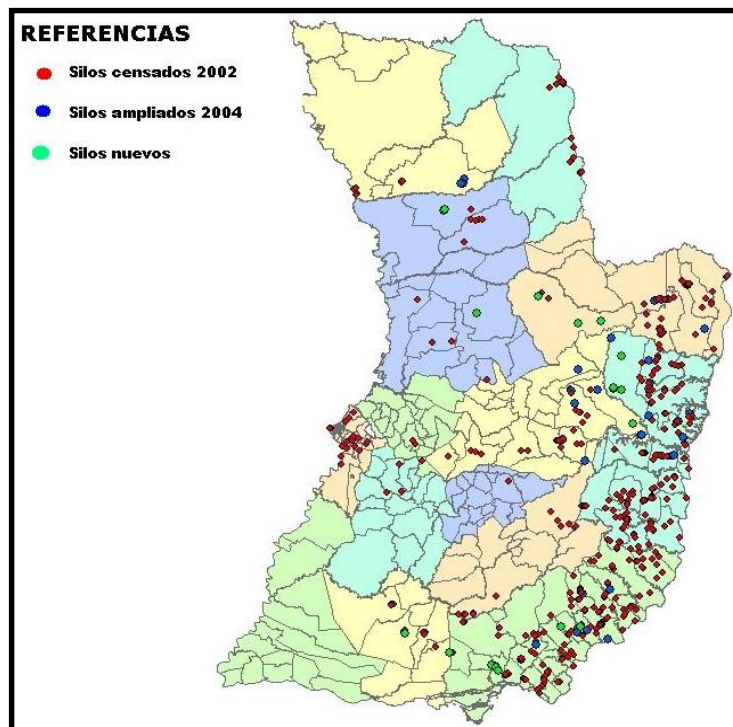
Source: CAPECO

The European Union countries are the major destination for Paraguay’s soy grain exports, accounting for about 50 percent of the total, while Russia occupies second place, followed by Brazil, Turkey, Mexico, and Israel, among the most important markets for the product.

It is significant that Paraguay currently has **37 grain ports** and the largest river fleet in South America. However, it is necessary to resolve logistic problems in the terminals of some of the ports, especially the logistic problems in the terminals of the ports of Franco de Rosario (Argentina) and Nueva Palmira (Uruguay) which are reshipment terminals for most of Paraguay's soy exports.

There is also an excellent infrastructure for storing the grain, with more than **500 silos** installed. They are strategically distributed, and have adequate capacity for storage of the grain production. Their location is shown on the following map:

Map No. 4 - Location of Silos



Source: Gathering of Grain – C. Pegoraro

The preceding map also indirectly shows the demand for firewood, which is another of the primary causes of deforestation.

This reality, the expansion of the agricultural frontier at the cost of the forests, highlights the need for adjustments in government policies if the objective is truly a country with sustainable growth and greater social equity. For this to happen, it is necessary to identify policies that will cause the economic stakeholders and the various social groups to adapt to the dynamic of a new vision of sustainable development.



2.a.7 Family subsistence farming

Family farming accounts for 90 percent of the productive farms in Paraguay and is a “strategically important sector” for reducing by half the rate of 19 percent of the Paraguayan population that lives in poverty. Family farms occupy 6.6 percent of the national territory and produce 60 percent of Paraguay’s food. 85.5 percent of the land is owned by ranchers and soy farmers.

According to Paraguay’s 2008 National Agricultural Census, the primary sector (agriculture, livestock raising, forestry, hunting, and fishing) employs 26.9 percent of the economically active population (EAP), creating jobs for about 785,000 persons.

Family farming has a strategic role in the food supply and the value of the basic basket for domestic consumption. It produces 11 of the 19 food categories (58 percent), for both domestic consumption and export.

This sector is characterized by: (a) sub-employment on the farm; (b) low productivity in the use of the factors of production; (c) limited market penetration; (d) predominance of production for home use; (e) little use of technology; (f) low income; (g) reduced education level; (h) weakly organized for production and marketing; (i) does not fully use available land; (j) income comes mainly from sugarcane, cotton, sesame, and cassava; (k) uses basically family labor.

Owing to lack of information it is not possible to estimate this particular group’s impact on deforestation.

2.a.8 Beef production

Ranching is a traditional activity in Paraguay and has assumed an important role in the economy in the last decade. Between 2008 and 2012, livestock increased by 27 percent, from 10.5 million head to 13.3 million head, with an average annual increase of 500,000 head. 60 percent of the herd is in the eastern region and 40 percent in the western region or Chaco.

The Agricultural Census of 2008 recorded an increase of more than 5 million hectares of pasture in comparison with the census of 1991. The greatest growth rates, both in number of cattle and pasture area in recent years, were in the western region of Paraguay or Chaco. The expansion of soy in the eastern region, which has displaced livestock in some zones in the region, is linked to the low price of the land, and the absence of social conflicts (invasions and rustling) has been a key factor in this growth. The highest growth rates in the number of cattle have varied from 50-70 percent in the Chaco in comparison with 28-33 percent in the eastern region.



Livestock production is based mainly on pasturing systems (natural and cultivated pastures). The production is accomplished with three types of operation: (i) small operations (less than 100 head) with limited use of technology, where the livestock are raised primarily for domestic consumption and occasional local sales, (ii) medium operations (100-500 head) with greater use of technology and access to assistance for the production, which is sold in local or regional markets, and (iii) large ranches (more than 500 head) specializing in the production of better quality animals for local and international markets. This group of producers is well integrated in the supply chains for national and international markets, has access to credit from private and public banks, and is responsible for modernization of the production through selective breeding, livestock management practices (health, nutrition), and the use of machinery and technology (i.e., artificial insemination, transfer of embryos).

Livestock is raised on 122,229 ranches and estates throughout the country. Large-scale production includes 2,411 ranches (2 percent), which have 55 percent of the total number of livestock. Small-scale operations are practiced on 77,162 ranches (58 percent), which have only 5 percent of the total number of cattle in the country.

In 1994 the whole country had 13,497,051 hectares of pasture, of which 3,286,352 hectares (33 percent) were cultivated; in the eastern region there were 6,789,405 hectares, of which 2,025,873 hectares were cultivated, and in the Chaco 6,767,526 hectares with 1,257,479 hectares cultivated.

While the 2008 agricultural census showed the country's total pasture area as 17,685,620 hectares, an increase of about 40 percent over 1994, in the eastern region there were 6,907,801 hectares (an increase of only 10 percent), but in the Chaco there were 10,777,819 hectares (a 70 percent increase), which indicates that in this last decade the expansion of pasture of livestock has been much greater than that of the eastern region, which may also be related to the large increase in land prices in the eastern region for the expanded soy cultivation, but in both cases the extension of the agricultural frontier has been at the expense of the forests.

2.a.8.1 Financing of production

Between 2006 and 2013 (April) the financial system's portfolio of loans to the livestock sector increased from US\$166 million to US\$1.1 billion, an increase of 581 percent. The livestock sector accounts for 12 percent of the total loan portfolio. The private sector provides 92 percent of the financial resources, while the public sector is responsible for the remaining 8 percent.

2.a.8.2 Marketing

In recent years the beef industry has been mainly oriented to production for export. 97 percent of the total production is exported, and the remaining 3 percent is for the domestic market. The eastern region accounted for 42 percent of the exports, and the Chaco 58 percent.



Export destinations are greatly influenced by sanitary issues; the presence or absence of foot-and-mouth disease (FMD) determines the destination and the type of beef exported. Chile and Brazil are the principal markets for refrigerated beef. The Chilean market received 89 percent of the total exports in 2010, but this plummeted to 0.3 percent in 2012 because of an outbreak of foot-and-mouth disease. The Brazilian market consumed 93 percent in 2012, whereas in 2010 it only took 6 percent. The principal destination for frozen beef is Russia, which bought 80 percent of the total exports in 2012.

2.a.9 Rural life and poverty

The country's agricultural productive structure has a marked dichotomy, with two basic sectors engaged in a discrete and conflictive relationship. One—the modern business sector—concentrates productive assets and works on a larger scale. The other—the traditional agricultural sector of the small farmers and native peoples—firmly maintains a different sociocultural pattern.

The Permanent Household Survey in 2008 shows that 48.8 percent of the rural population is living in poverty, compared with 30.6 percent of the urban population, and 30.9 percent of the rural population is in extreme poverty, compared with 18 percent of the urban population.

Rural poverty in Paraguay is concentrated in the family farm sector, which according to the 2008 agricultural census accounts for 86 percent of the farms registered, occupying 6 percent of the area.

2. a. 10 Institutional and policy constraints

Notwithstanding some relatively recent innovations in the sector, there is a series of institutional level restrictions that make it hard to overcome the interrelated problems of poverty, deterioration of natural resources, and stagnation in the productivity of the family farm sector.

Historically there has been little coordination between government agencies responsible for rural and agricultural development and its environmental sustainability. Neither the MAG nor any of the various independent agricultural entities has developed effective capacities for connecting with the territorial government levels; reactive and unconnected bureaucratic centralism remains the basic characteristic of management.

The Agrarian Strategic Framework for 2009/2018, developed by the MAG to spur the country's agrarian development with a long-term horizon, has as an essential component the “*development of adequate sector institutions and the redesign and restructuring of the MAG,*” underscoring that this must be part of a systemic institutional approach joined with integrated area projection. This strategic framework also includes the “*Strategic Policy for Sustainable Forest Development and the Production of Environmental Services.*”



2. a.11 Level of deforestation and status of the forest resources in Paraguay

The National Forest Inventory has taken 1990 as a base year and is being carried out under the UNREDD National Joint Program (NJP) by the National Forestry Institute, as a member of the National Technical Team, together with SEAM and the FAPI.

For 1990, the country’s estimated forest area was **21,929,253 hectares**; for 2011, it was **16,623,387 hectares**, a decline of **5,305,866 hectares**. This is a loss of **252,660 hectares** per year.

Preliminary results of the Inventory of Forests and Carbon indicate that in the eastern identified forest area declined by 2,095,395 hectares between 1990 and 2011, a deforestation rate of 99,780.7 ha/year. In the western region, the decline during the same period was 3,210,471 hectares, a deforestation rate of 152,880 ha/year.

Table No. 7 shows the area of coverage (forest and non-forest) in Paraguay. It reveals that 40.9 percent of the area is forest (16,623,387 hectares), and 59.1 percent is non-forest (24,051,813 hectares).

Table No. 7 - Estimate of the Forest Area Broken Down by Regions

Region	Area (ha)	% forest	% of the country
Eastern region	2,607,420	15.7	6.4
Western region	14,015,967	84.3	34.5
Total	16,623,387	100.00	40.9

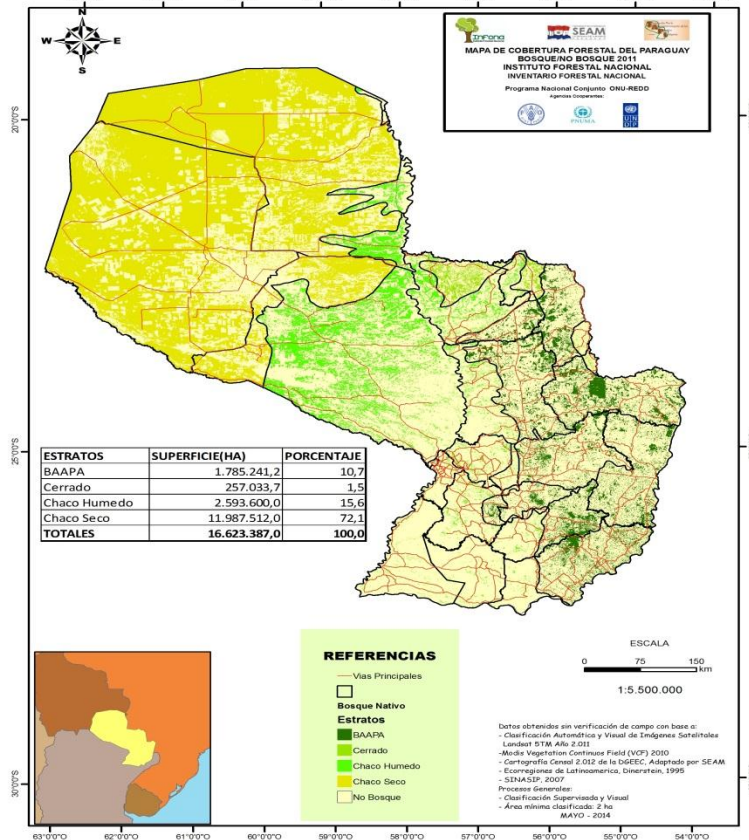
Source: UNREDD-NJP, 2014

The forests identified with productive potential in the eastern region amounted to 0.8 million hectares. 20 percent of this forest area was categorized as very fragmented, while in the western region 9.2 million hectares of forest cover were identified, of which only 1 percent was very fragmented.

An atlas recently produced with support from the FAO for the National Forestry Institute has identified an area of “potential production coverage,” which is 14,397,711 hectares at the national level, of which 87 percent is in the Chaco, while “forest protection coverage for water basins” has an area of 544,185 hectares, and the “potential forest development zone” covers 20,000,000 hectares (see maps in the appendices). In Paraguay the National Forest Inventory has defined six forest categories, of which five are natural formations and one is planted forests or tree culture. The categories for natural formations are: Atlantic Forest of the Upper Paraná (BAAPA), Humid Chaco, Dry Chaco, Savanna, and Palm Forest; for the REDD+ the categories are reduced to four, BAAPA, Savanna, Humid Chaco, and Dry Chaco.



Map No. 5 - Forest Coverage with Classification of Forests



Source: UNREDD-NJP, 2014

A major part of the forests that are in the public domain are under the National System of Protected Wilderness Areas (SINASIP), which was established in the 1990s.

During that period various laws were enacted for the conservation of natural resources, such as the Law on Protected Wilderness Areas, the Wildlife Law, the Wild Fauna Law, the Fisheries Law, and the Environmental Assessment Law, thus creating a coherent legal framework for the conservation and protection of natural resources.

The SINASIP embraces 10 different categories for management of protected wilderness areas (ASP). The country currently has more than 6,000,000 hectares of protected wilderness area



that occupies 15 percent of Paraguay’s total area, of which 5.9 percent are 31 ASP in the public domain; 0.8 percent in 10 ASP are privately owned; 0.15 percent in 7 ASP are owned by binational entities; and 8.3 percent are Biosphere Reserves. These reserves represent most of the ecosystems and biomes in the country.

The following maps show the distribution of the public protected wilderness areas (ASP), and their location in the national territory. It is important to note that in the eastern region, which has experienced high historic deforestation, the forest remnants are in the ASP, but they are surrounded by soy cultivation for the most part, so there is a high risk of degradation that needs to be quantified, along with determining their risk of deforestation. The maps show the forest and non-forest areas in relation to the ASP system.

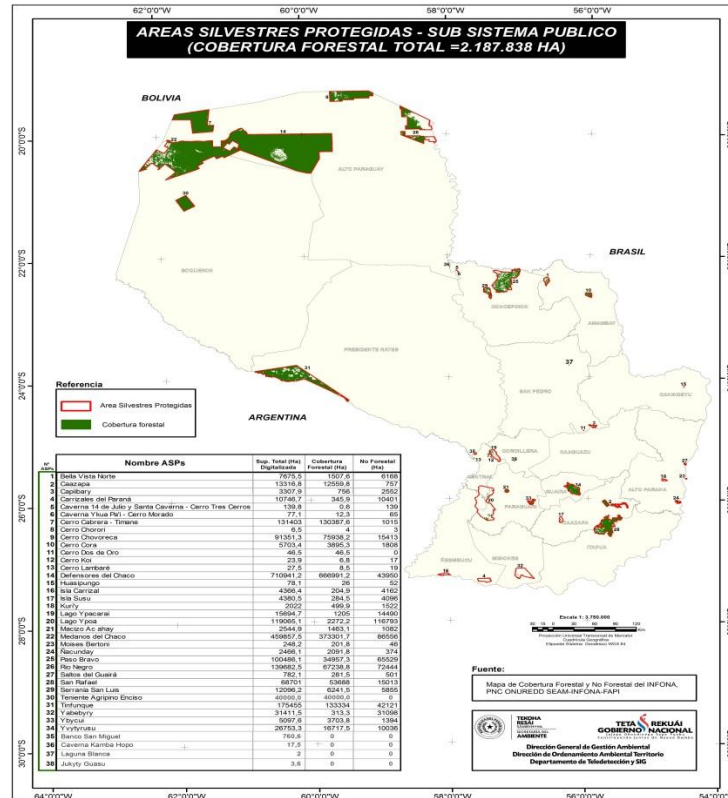
Some initiatives are under way, such as the project “Improving the Conservation of Biodiversity and the Sustainable Management of Land in the Atlantic Forest of Eastern Paraguay,” better known as PARAGUAY BIODIVERSITY. It is an initiative of Itaipu Binational, in its social responsibility project, executed jointly with the Secretariat of the Environment (SEAM) and the Ministry of Agriculture and Livestock (MAG) through the PRODERS (Sustainable Rural Development Project).

This project’s objective is to conserve biological diversity of global significance and to promote sustainable land use in the productive environment of the Atlantic Forest of the Upper Paraná (BAAPA) and associated ecosystems in Paraguay. Paraguay Biodiversity is being executed in six of the country’s departments (Canindeyú, Upper Paraná, Caaguazú, Guairá, and Itapúa) until April 2016, with technical and financial support from the Global Environment Facility (GEF) and the World Bank.³

³ Paraguay Biodiversity Project: Itaipú Binational is the executor of the Paraguay Biodiversity project; the co-executors are the Environment Secretariat (SEAM) and the Ministry of Agriculture and Livestock (MAG), through the Sustainable Rural Development Project (Proders), carried out jointly with the World Bank. The project has a grant from the Global Environment Facility (GEF) through the World Bank. Paraguay Biodiversity will affect the departments of Canindeyú, Alto Paraná, Caaguazú, Caazpá, Guairá, and Itapua, covering more than 50 municipalities that are part of the Atlantic Forest of Alto Paraná, including some 900 small projects that generate jobs for peasant farmers and indigenous people, including students in schools that are remote from urban centers.



Map No. 6 Protected Wilderness Areas in the Public Domain (Forest Coverage)



2. 1. 12 Wood for energy use

Paraguay's primary energy source consists mainly of renewable sources of energy. Hydropower (from binational hydroelectric plants) and firewood are the primary energy sources. In the breakdown of power sources, hydropower predominates with about 57 percent. Much of this power is exported to neighboring countries. On the use side, 46 percent of the final energy consumption in the country comes from biomass, 38 percent from fossil fuels—primarily petroleum, while electricity (generated almost exclusively by hydropower), is only 16 percent. The high percentage of biomass in the final consumption causes major environmental problems in terms of deforestation and soil degradation, because the biomass comes almost exclusively from wood obtained from non-sustainable crops (disforestation).

The demand for firewood originally came from the peasant farmers. The situation has changed, however, and now most of it comes from the soy sector for maintenance of silos,



and in the western region for cold storage for the livestock sector, so firewood from forest use, legal and illegal clearing, and native forest is an input for the production of beef and soy. This is another source of significant deforestation and at the same time an opportunity for the incentive for energy plantations in the country.

The amount of firewood used to dry grain is 0.08 tons per ton of soy, and 0.6 tons per ton of wheat, corn, and sunflower; therefore the total use of firewood is 333,000 tons for soy, 673,000 tons for wheat, 1,865,000 tons for corn, and 118,000 tons for sunflower (Table 3). Large silos use 80 to 400 kilograms, small silos use 700 to 800 kilograms per ton of corn for drying, according to data provided by the CAPECO.

It is estimated that production of about 13 million tons of grain uses about 3 tons of firewood. In years of small harvest and drought, firewood consumption would probably be about 1.6 million tons.

Studies indicate that Paraguay produces about 700 million liters of milk per year. This ranks the country number 13 among the countries of Latin America and the Caribbean (ABC Color, cited by APROLE 2012). For example, in 2011 742 million liters of raw milk were produced (National Accounts of the BCP 2003 and CADEP 2011, cited by IICA Paraguay 2011a). Producing 700 million liters of milk a year would require 30,576 to 38,488 tons of firewood. The range is broad because of the wide variation in the daily milk production in the industries surveyed. In addition, according to SENACSA, cited by IICA Paraguay (2011b), 1.4 million head are slaughtered per year in Paraguay, with an average weight of 236 kilograms, which gives a total of about 330,400 tons of beef per year (considering 1.4 million head slaughtered per year). Figuring that 0.076 tons of firewood is used to produce 1 ton of beef, 25,192 tons of firewood would be required.

Adding these estimates gives an annual use of about 56,000 to 64,000 tons of firewood for beef and milk production at the national level. It was estimated that 22 percent of the thermal demand could be replaced by the biogas produced, the equivalent of 330 tons of firewood per year.

The country is in a state of forest emergency because of the lack of solid biomass in all sectors. The supply of sustainably produced wood is insufficient to cover the current demand. According to the biomass statistics in this report, the annual biomass deficit is between 10 and 13 million tons.

It is urgent to recognize the country's growing demand for energy. It is very likely that prices of solid biomass will continue climbing, which would mean high costs for the industries, affecting their competitiveness. Lacking an urgent effort to plant rapid-growth forests, the biomass-dependent industries will not be supplied, causing negative socioeconomic effects. Similarly, there will be a shortfall in fuel for domestic and business use.

Paraguay has ideal natural conditions for reforestation with sufficient space and suitable land, without competing with food production for domestic consumption. It is also possible to



integrate forest/pasture systems and agroforest systems that offer options for producing energy and food at the same location. In several countries these systems have demonstrated how to maximize soil use.

The current demand for wood already exceeds the production capacity of the forests in the eastern region, although the industry can still meet its needs with wood production generated by clearing, thereby establishing a *perverse relationship* between the forest industry and deforestation. This gap between the capacity for sustainable wood production and the actual production is shown in **Tables 8 and 9** below:

Table No. 8 – Estimate of Current Productivity and Sustainable Production of Forests

<i>Forest type</i>	<i>Origin / Region</i>	<i>Area (1,000 ha)</i>	<i>Productivity (⁽¹⁾ (m³/ha/yr.)</i>	<i>Sustainable Production (⁽¹⁾ (1,000 m³/yr.)</i>
Plantations	Forest plantations (Eucalyptus & pines)	61	26	1,600
	Other plantations (Paraiso & natives*)	84	6	500
	TOTAL	145	-	2,100
Natives	Eastern	700	1.5	1,000
	Western (Chaco)	9,000	0.5	4,500
	TOTAL	9,700	0.6	5,500
GRAND TOTAL		9,845	-	7,600

(¹) Estimates by I.Tomaselli and V. Vidal for the Strategic Plan for Forest Competitiveness. 2013

** Weighted average productivity for Paraiso and other native species.*

The above table presents an estimate of the potential sustainable production of the native and planted forests in Paraguay, which is **7.6 million m³/year** according to calculations of the above-cited consultants.

Currently about **28 percent** of this total production is from planted forests and **72 percent** from native forests.

The demand for wood for domestic use and export is satisfied with the output of the country's forests, which is reflected in **Table No. 8**.

This gap between *demand / sustainable production* for wood can be seen in the statistics on wood production that far exceeds the sustainable production capacity of the country's forests.



Table No. 9 – Number of Industries and Estimate of the Forest Production Capacity

<i>Industrial segment</i>	<i>N° of Industries/ Producers</i>	<i>Estimate of average annual production capacity</i>	<i>Estimate of total annual production capacity(*)</i>
Charcoal (m ³ c.v)	200	13,800	2,760,000
Wood (m ³) (*)	1,500	10,300	15,450,000
Lumber (m ³)	600	850	510,000
Wood floors (m ³)	30	2,500	75,000
Plywood (m ³)	8	7,000	56,000
Laminate/veneer (m ³)	15	2,800	42,000
Others, carpentry, furniture, doors, and windows (m ³)	4,500	30	135,000
TOTAL	6,853	-	19,028,000

Source: FEPAMA, REDIEX, FAO, (*) Estimates by I.Tomaselli and V. Vidal for the Strategic Plan for Forest Competitiveness. 2013

The potential use of land in the eastern and western regions can be seen in **Table No. 10** below:

Table No. 10 – Potential Use of Land by Region

<i>Parameter</i>	<i>Area (1,000 ha)</i>	
	<i>Eastern region</i>	<i>Western region</i>
Total area	15,983	24,693
Area suitable for forestation and reforestation	5,640	3,273
Remnant native forests (suitable for forest management)	700	9,000

Source: REDIEX, 2010

From the statistics analyzed in the preceding tables on the production capacity of the native forests remaining in the country it appears that **17,200,000 m³** of logs are used annually, greatly exceeding the potential for sustainable production of Paraguay's forests, which can provide **7,100,000 m³**. Consumption is **2.4 times** the current potential for sustainable production.

Taking into account these figures, we conclude that the country is exhausting its forest resources at a rate of about **10,000,000 m³/year**, representing about **100,000 hectares** of natural forest converted to other uses.



It should be noted that most of the wood production (*about 90 percent*) for firewood and charcoal, according to figures supplied by the *National Energy Balance Sheet 2012*, which indicates that of the end use of energy in Paraguay 4,409,700 TEP, **47.6 percent** corresponds to biomass.⁴ Based on the factors for conversion of TEP to cubic meters of wood, and considering an average density of 0.650 ton/m^3 , this is about **11,000,000 m³** of solid wood.

A recent study published by Itaipú Binational⁵ confirms these figures, concluding that **46 percent** of the energy used comes from burning biomass, mainly wood and charcoal.

It is clear that the demand for wood already surpasses the capacity for sustainable production from the country's forests.

In this context Paraguay's forests continue disappearing, due largely to the existence of better alternatives for the use of the land for agriculture (*principally soy*) and pasture for the production of beef, which are the mainstays of the economy and the country's growth, albeit with major environmental damage from the progressive disappearance of the forests, which in the medium term will adversely impact the sustainability of agricultural production if the situation is not reversed.

According to the data analyzed, current land use in Paraguay has the following breakdown: **43 percent** is in native forests, **29 percent** is for livestock (pastures), and **18 percent** is for agriculture.

A recent evaluation of the eastern region with the latest geo-spatial technology shows that agriculture and pasture cover more than **80 percent**. Ranching occupies about **8,000,000 hectares**, with a high level of underutilization. Agriculture is also substantial, with **5,000,000 hectares**. In both productive sectors there are abandoned areas (*estimated at more than 500,000 hectares*) that are adequate for forest plantations and management of re-emergence of forest species of value for regeneration and building new native forests.

There are no precise figures for the western region (Chaco). In any case, the data presented appear to be reasonably accurate, with the predominance of forested areas and pasture.

Control of **deforestation** is based on legislation to prevent it, such as the Law for **Zero Deforestation (Laws No. 2524/04, No. 3139/06, and No. 3663/08)**. Effective implementation of these laws demands an urgent program for the institutional strengthening of the sector. In fact, this legal restriction in the eastern region is having the effect of transferring deforestation to the Paraguayan Chaco where there is no such restriction. Table No. 11 shows the forest area in five departments in the eastern region with the greatest forest cover.

⁴ Of the total consumption of biomass, 4 percent is alcohols.

⁵ Paraguay Energy Balance Project (BEP), Itaipú-Paraguay Technological Park (PTI-PY).



Table No. 11
Forest Area in Five Departments of the Eastern Region with the Greatest Forest Cover

Department	Forest area (ha) 1999	Forest area (ha) 2003	Forest area (ha) 2011
Concepción	607,011	573,426	500,328
San Pedro	598,795	513,884	341,273
Caaguazú	365,268	293,093	183,471
Caazapá	287,951	230,847	186,691
Canindeyú	634,890	540,091	379,794
TOTAL	2,493,915	2,151,341	1,591,557

Source: UNREDD-NJP, 2014

These statistics, compared with data supplied by the studies of **JICA/SFN** (2000), the **MFN** (2003) and the preliminary results of the **IFN (2011)** cited above, show the shrinking of the forest cover that has taken place in recent years in these five departments of the eastern region.

This geographic concentration of the deforestation has resulted from the economic development policies of successive governments that have increased the relative and absolute importance of the agricultural sector in the national economy, although this increase did not have the desired balanced effect on rural production, and in the case of the native population deforestation also caused *displacement* of indigenous communities from their habitat.

In the western region, which has a much more fragile ecosystem, a growing deforestation process has also begun. Satellite monitoring studies done by Guyrá Paraguay⁶ have shown lately that up to **1,000 hectares per day** are being deforested in the Chaco. These alarming figures highlight the seriousness of the situation in this fragile region and the urgency for taking measures to find viable solutions for conserving these forests of great value for the preservation of biodiversity and the Chaco's environment.

The other side of forest coverage shows that **reforestations** have done little to increase the forest base in the country because the various incentives established in different periods have not had the desired result.

Reforestation incentives in Paraguay began with the promulgation of the **Forest Law No. 422/73** whose effect was very limited owing to the lack of financial resources for the particular requirements of reforestation and also to their improper use.

Law 4241/2010 on Restoration of forests that protect water sources declares the national interest in establishment of forests to protect water resources in the eastern region and preserve them in the Chaco. In this context it establishes as protective zones the natural areas bordering the water resources in accordance with Law 3339/07 on water resources, and for the purpose of its application protective forests are those that meet the criteria established in

⁶ www.bbc.co.uk/.../100416_1750_chaco_deforestacion_paraguay_alfshtml



Article 6 of Forest Law No. 422, in which the National Forestry Institute is the authority for application in coordination with the SEAM, governorships, and municipalities.

Law No. 125/91 on tax reform contained tax incentives for reforestation through exemption of a portion of the income tax on profits from forest plantations, but there are no records of firms taking advantage of these benefits and they were soon less attractive than those offered by **Law No. 536/95**.

Law No. 536/95 on promotion of forestation and reforestation introduced a new system based on a direct subsidy to reimburse 75 percent of the expenses of the plantation and its maintenance for the first three years, which was only operational for a few years until financial difficulties, related to the recession of the past decade, effectively interrupted it and there is no precise data on its execution and the current status of the plantations that benefited from these tax benefits.

According to data of the National Forestry Institute, the reforested area in Paraguay is **66,000 hectares**, including the different types of incentives implemented in recent decades. Exotic species account for 90 percent of the reforestation (*Eucaliptus grandis*, *Eucaliptus camaldulensis*, *Pinus taeda*, *Pinus elliotti* y *Melia azedarach*). Most of the plantations are in the eastern region (see following **table**).

Table No. 12 – Forest Plantations Established as of 2012

<i>Program</i>	<i>Period</i>	<i>Area (ha)</i>
National Reforestation Plan (Law No. 422/73)	1975 / 1980	10,025
Energy plantations	1991 / 1994	1,763
Compensatory plantations	1992 / 1993	1,227
Model forests	1997 / 1998	115
Law No. 536/95 Promotion of Reforestation	1995 / 2004	34,023
Monitoring by the National Forestry Institute	2010	8,940
Monitoring by the National Forestry Institute	2011	10,010
TOTAL AREA		66,103

Source: Forest Development Directorate – INFONA (2012)

The atlas presented by FAO/INFONA that was mentioned above reports fewer forest plantations that occupy **52,829 hectares**.



2.a. 13 Forest industries, employment, and trade

Notwithstanding isolated efforts to improve the technology and increase the production capacity of forest industries, the technological level of wood processing is still low; few producers have the right infrastructure and technology to compete in demanding markets. The indexes of conversion from *log - lumber* are generally at a low level.

It is estimated that the forest sector provides occupation directly or indirectly to more than *100,000 persons*. However, these estimates are unreliable because there is no precise record of persons employed in the sector. The Paraguayan Federation of Lumbermen (FEPAMA) keeps a register of persons classified by activity that includes *41,000 persons (1.6 percent of the EAP)*.

The classified activities are broken down by *86 percent* employed in industry (mainly carpenters, sawmill operators, and charcoal makers), *9 percent* in the forests (mainly sawyers), *5 percent* in marketing (forwarders, exporters, cargo), and only 1 percent in forest plantations.

The sector *exports* forest products for more than *US\$100,000,000⁷* a year. The forest product of greatest export value is parquetry for floors, which accounts for *32 percent* of the total value of recorded wood exports, while in second and third place are lumber and charcoal, *24 percent* and *21 percent* respectively.

The *lumber* goes primarily to the MERCOSUR countries (*74 percent* of total exports). Other markets are in Asia (the People's Republic of China, Hong Kong, and Taiwan); Chile, the United States, and Spain are also important.

Exports of *furniture* are not significant. The main markets are Argentina with *42 percent*, Uruguay *12.6 percent*, and Spain *12.4 percent*.

Owing to the reduction in the supply of native hardwoods in recent years, there has been an increase in the import of wood from different origins.

2.a. 14 Institutional framework for financing

Financial sector institutions to facilitate sources and financial mechanisms for funding forest investments are very important. Among them are:

The **Banco Nacional de Fomento** [National Development Bank] (*BNF*) is the only government financial institution that uses public funds for loans, and it is authorized by *Law No. 536/95* to finance forest plantation projects as provided in *Article 11, Chapter II* of that law, which reads: “*The Banco Nacional de Fomento shall make long-term, low-interest*

⁷ Bulletin of the Central Bank of Paraguay, December 2009.



preferential loans to the beneficiaries of this law, for which purpose it shall require the certificate of approval of the plan together with the loan application.” However, since this development finance institution lacks sufficient financial resources under the special conditions for meeting the particular requirements of the forest plantations, its coverage of forest loans has actually been quite modest.

The **Fondo Ganadero** [Livestock Fund] is the official bank that finances investments in the livestock sector and has recently made available to producers financial resources at reasonable interest rates and terms for use in forest/pasture activities.

The **Agencia Financiera de Desarrollo** [Financial Agency for Development] (*AFD*) has as its mission “*to promote economic development and create jobs by channeling medium and long-term funding to the private sector.*” The *AFD* assumes financial risks and the **financial entities** (banks, financiers, and credit unions) make financial resources available in flexible conditions for forest investments, especially in reforestation.

The **Instituto de Previsión Social** [Social Security Institute] (*IPS*) is an institution whose funds, which belong to its insured contributors, have been used to finance investments in various productive and commercial sectors, which can be a formidable instrument for financing forest investments, especially for reforestation because of the nature of the funds collected by this institution.

The **Stock Exchange** could also be an interesting option for financing for forest development although its functioning is still weak because the important corporations prefer to go to commercial banks for funds rather than to the Stock Exchange, thus displacing small companies from access to limited financial resources because the commercial banks prefer larger companies that are more creditworthy. It is necessary for the Stock Exchange to adopt a more **development-oriented approach** to consolidate this system and make it a viable alternative mechanism for forest financing. The Stock Exchange has currently opened up the possibility of placing “*Certificates of Payment for Environmental Services*” on the market.

In summary, although the financial system’s role is to **intermediate** efficiently and effectively between savers and borrowers, Paraguay’s financial market does not yet have these characteristics, mainly due to problems of **liquidity risk** because most of the savers’ money is not in long-term deposits, which requires the government to intervene in financial intermediation to supplement **private banks** and reach the sectors they cannot serve to facilitate access to medium and long-term loans such as those needed for forest investments.

With respect to **forest education and research** the most important institutional program is the **Forest Engineering Curriculum** of the Agricultural Sciences Faculty of the National University of Asunción, which trains human resources at the university level with a degree as Forest Engineers and conducts forest research programs. There is also the **Instituto Paraguayo de Tecnología Agropecuaria** [Paraguayan Institute of Agricultural and Livestock Technology] (*IPTA*), established by **Law No. 3788/09**, which will carry out forest research policies and programs.



The institutional entity in the **judicial branch** dealing with forest activity is the **Fiscalía del Medio Ambiente** [Environmental Prosecutor’s Office], under the Office of the Attorney General (Public Prosecutor’s Office). Its function is prosecution of acts criminalized in *Law No. 716/96* and *Law No. 1160/97*, the Criminal Code.

In the **National Congress** there are two ecology committees in the Senate and Chamber of Deputies, and one bicameral committee: the “**National Committee for the Defense of Natural Resources**” (CONADERNA).

With respect to the *institutions of regional and international instruments* under which Paraguay has assumed significant international commitments with various conventions and agreements, along with commitments in free market processes and regional agreements, among which the most important are the MERCOSUR commitments and the agreements approved at the Third Earth Summit in Rio de Janeiro, such as the *Rio Declaration on Environment and Development; Convention on Biological Diversity; Convention on Climate Change and the Principles on Ranking and Sustainable Development of Forests; and the UN-REDD Program*.

Because these commitments are legally binding instruments they were subsequently ratified by the National Congress. In all these agreements forests play a key role and their principles have been taken into account in the process of drafting national forest policy and the strategic planning for sustainable forest development. A number of other international commitments relate indirectly to forests.

2.a.15 Strengths and weaknesses of the forest sector

The diagnostic of the current situation of the country’s forest sector has led to the conclusion that the sector has important strengths as well as some significant weaknesses that affect its development.

The principal **strengths** of the sector are based on the potential of the natural forests to provide the goods and services required by society. The size and wealth of the forest ecosystem means it can be significant in the short, medium, and long term as an important generator of income and a vehicle for local and foreign investment.

It can also help to resolve many problems that impede the development of the rural zones by creating opportunities for generating new income and job sources. Incorporating forest management, reforestation, and agroforestry in the agricultural systems can improve not only family income but the environment in the rural area and contribute to *alleviating rural poverty* in the country.

Forest industries have the capacity for increasing production, introducing new technologies with more competitive levels of processing, more value added and higher quality of processed products, and favorable conditions for the organization of clusters of forest



industries to enhance their competitiveness in new markets opening up in the context of accelerated globalization of trade.

Although Paraguay is landlocked, it has an important river and highway system to facilitate the transport of forest products to markets in the region and overseas. It has to capitalize on the fact that Argentina and Brazil, the two largest markets in MERCOSUR, have a deficit in hardwood to satisfy the growing demand of their markets; Paraguay, because of its strategic location, is a natural supplier of wood for them.

The markets in Europe, Asia, and the United States are also important but they demand higher quality of wood and manufacturing, so the industries are already upgrading their technology and sustainable forest management to maintain these markets.

The potential of ecological tourism is steadily expanding and can be further developed with an appropriate strategy to encourage investment to improve the current insufficient tourism infrastructure.

Another potential of the country's forests is related to the capacity for mitigating *climate change* through actions related to carbon sequestration and to possibilities for receiving payments for *environmental services* deriving from the forest, already contemplated in the recent environmental legislation.⁸

2.a.17 Environmental services

Law No. 3001/06 “on Assessment of and Compensation for Environmental Services” seeks to encourage the conservation, protection, recovery, and sustainable development of biological diversity and the country's natural resources through assessment and fair, timely, and adequate compensation for environmental services. It also seeks to contribute to compliance with the international obligations assumed by the Republic of Paraguay. The decrees that regulate the application of the above law are Decrees No. 10.247/07 and No. 1.202/13 and the resolutions of the Secretariat that have regulated the arrangements for assessment and compensation because there was no methodology for it.

The number of hectares certified so far is 30,814.0381, reflecting certified forests in the eastern and western regions of 26,251.0381 hectares and pastureland of 4,563 hectares.

Although the law was enacted in 2006, it was only last year that the first certificates were issued for 11 projects and establishments at the national level that met the requirements for the System of Assessment of and Compensation for Environmental Services.

Projects of indigenous communities for using the environmental services system are being processed.

⁸ Law No. 3001/2006 on Assessment of and Compensation for Environmental Services, Resolution No. 531/08 of SEAM



2.a.18 Analysis of the general context of the causes of deforestation

There are many *external factors* to the forest sector that hinder the development of its potential and prevent forest activities from being, as they used to be, principal contributors to Paraguay's economic growth.

It is clear that *intersector effects*, caused by policies designed in other sectors of the economy, have exerted more influence than the actual forest policies on the management and conservation of forests, especially undesirable impacts.

These considerations and the very complexity of the problems of forest conservation and sustainable forest production demand an in-depth analysis of all available information on the problem and the need for appropriate interpretation of the numerous *interactions* of the political, economic, social, and environmental aspects.

It is currently impossible to ignore the great importance of the impact of other policies related to forest sector development, such as agricultural policies, industrial policies, trade, transportation, etc., and the *intra-sector* policies such as those on rural development, land tenure, land use planning, and the environmental policies themselves, which are ever more numerous.

For the foregoing reasons, the traditional aspects of forest conservation cannot be dealt with as matters pertaining only to the sector; they must be considered in the broader context of national policies. Hence the importance of stressing the value of the objectives of forest development and incorporating it in the context of the drafting and implementation of the national policy.

2.a.19 Economic and demographic context

The country's rates of *economic growth* have fluctuated in the past decades, but in the latest years, after a pair of years of recession, there has been a spurt of growth of nearly *15 percent* in 2013. The forecast is for continued strong economic growth at reasonable rates over the next years, which should be reflected in growth of investments and productive activities as well as consumption, which will generate new activities and products that undoubtedly *will affect* the climate and *will contribute* to global warming and climate change in the country.

Another aspect is the high *population growth* compared with developed countries. The population increase expected over the coming decades by the Directorate of Statistics, Surveys, and Censuses (*more than 2 percent annually*) will undoubtedly exert additional pressure on the sustainability of the productive processes and their environmental consequences. The population increase, changes in land use transforming forests into agricultural crops and pastures, industrial growth, and the increase in the vehicle fleet with greater use of fossil fuels have combined to produce changes in the country's climate.



Reports of the United Nations Development Program (UNDP)⁹ show that *deforestation* has an important effect on climate change in Paraguay by reducing the amount of surface water, affecting the diversity of flora and fauna, increasing the levels of GEG, and favoring the propagation of diseases such as malaria, leishmaniosis, and epidemics of dengue caused by the *Aedes aegypti* mosquito that migrates to the urban areas because of the disappearance of its forest habitat as a result of deforestation.

According to the inventories conducted in the country, the activities that contribute most to the emission of GEG are those in the *energy, industrial, and agricultural* sectors, although the country's emissions are small in the global context.

Based on different scenarios of economic and demographic growth (*high, medium, low*) and considering observations of the total carbon emissions generated by the burning of fossil fuels in the country during the years of the observations, it is possible to choose a base year from which to make future projections. Thus, for each predictable scenario there would be the trend of carbon emissions over time.

With respect to climate monitoring, the PNCC Paraguay recommended creating climate scenarios at the seasonal level in different regions; producing different dry and humid climate scenarios; developing spatial climate scenarios and climate scenarios for the energy sector; and comparing climate patterns for various scenarios and time horizons.

Correlating this information with data on economic and demographic growth will make it possible to see the trends for the future emissions of greenhouse effect gases in Paraguay.

2. a.20 The impact of agricultural policies and rural development

The various stages of Paraguay's agricultural development have been *extractive* of natural resources, with land as an *abundant factor* of production. However, major *structural changes* began to occur in the 1970s, with highway infrastructure works that integrated vast areas to the country's economy, which together with the policy of distribution of public land led to a large *internal migration* of peasant farmers, including some from neighboring countries, especially southern Brazil, beginning in fact to create a national *agrarian economy* that impacted land tenure structure and forest conservation.

This process led to the rapid colonization of a region of vast natural forests in a zone of great agricultural growth in a period of only 20 years, with major negative environmental impact on the conservation of forest resources, biodiversity, and the environment in general.

The factors that accelerated this *short-term* process were the same land distribution policies, the credit policy, the lack of a suitable tax policy, and the failure to implement restrictions to guarantee the sustainable use of renewable natural resources.

⁹ UNDP. *Cambio Climático: Riesgo, vulnerabilidad y desafío de adaptación en Paraguay*. [Climate Change: Risk, Vulnerability, and Challenges of Adaptation in Paraguay] Mercurio–Asunción 2007



Agricultural and forestry production is Paraguay's main source of income and employment, and to increase this contribution the country needs *new strategies* for sustainable development, especially food production for the population, the generation and savings of foreign exchange, and the provision of raw material to satisfy the demand of agroindustry and forest industry and the generation of employment in the rural area.

It is necessary to implement a *macroeconomic model* that will facilitate sustainable development of production, offering *incentives* to producers and adequate productive and financial *security* so that growth in farming, ranching, and forest activity constitute rural development based on principles of *equity* and *sustainability*.

2.a.21 The impact of land tenure and use policies

Changes in land use are a complex problem caused by many interrelated factors with mutually reinforcing effects. It is rational behavior to consider only financial criteria, which in current circumstances clearly favor agricultural production over forest production, thus stimulating a *preference* for higher-income export products that have led to the clearing of vast forest areas.

Another variable that has heavily impacted individual choices on land use has been the development of the country's highway structure. Currently available land use maps clearly show how the opening of new roads, especially those built to reach new settlements, has affected spatial development, and the *deforestation* that has followed the route of the rural highways and roads.

Para abordar la problemática de la tenencia de la tierra, particularmente de pueblos indígenas, se han realizado estudios importantes, en el marco del Programa Nacional Conjunto ONUEDD, que permiten relevar la situación real de de tierras y territorios indígenas, incluidos aquellos que se encuentran en los conflicto.

Con la información generada y relevada en el año 2013 y 2014, se tiene previsto que en el primer semestre del año 2015, el Instituto Paraguayo del Indígena (INDI), con el apoyo de la FAPI y el Programa Nacional Conjunto ONUEDD, trabajaran en forma conjunta para el desarrollo participativo de un Plan de Trabajo que permita abordar efectivamente la problemática de las tierras y territorios indígenas, desde todas sus aristas, incluyendo el alquiler de tierras.

Este plan así mismo, considerará el impacto de las opciones de reducción de la deforestación y degradación identificadas, en particular aquellas relacionadas a la planificación del uso de la tierra, acciones para el sector ganadero y agrícola; y su vinculación con la problemática de la tenencia de la tierra de pueblos indígenas.



Inicialmente este plan permitirá consolidar los datos del relevamiento realizado sobre los casos que se encuentran en el INDI, así como también abordar las recomendaciones del análisis previamente mencionado.

El monitoreo de la implementación de este plan, en particular a los temas vinculados a tierras indígenas, será reflejado en el Sistema de Información de Salvaguardias (SIS) a ser implementado a nivel nacional, y retroalimentado con información generada de los distintos procesos que contemple el cumplimiento de las salvaguardas, así como también contribuirá al proceso SESA.

2.a.22 The impact of energy policies

Neither the business sector nor the rural communities are sufficiently aware of the importance of *efficient use* of these energy resources and they do not understand how to carry out rational exploitation of their forest resources. *Controls* on the utilization of firewood in the forests are very weak and ineffective, which can have serious consequences for the sustainability of forest resources, aggravating the *degradation* of the forests.

The country has developed many programs for increasing the efficiency of wood stoves, considering that the use of firewood and charcoal in traditional rural stoves and ovens results in significant energy losses, but these were isolated and unconnected programs that did not have the desired results.

Neither has the energy policy for greater use of the country's abundant hydropower made a significant reduction in the use of firewood for energy and its effect on the deforestation and degradation of the forests.

2.a.23 The impact of tax policies

The tax legislation of the central government and the municipalities has aspects dealing with natural resources and the environment, as reflected in *Law No. 125/91*, which has provisions with incentives for sustainability in the use of renewable natural resources. This is supplemented by a large number of legal provisions with unofficial objectives dealing basically with forest resources and the environment, and various fiscal and municipal agencies in charge of their application.

The following conclusions can be drawn with respect to the application of the tax policy:

- That the tax pressure and incentives established in the tax legislation and other related provisions on the subject appear to be inadequate for: (i) *stimulating private investment in the forest sector, especially if there is no evidence of tax evasion*; and (ii) *financing government plans, programs, and projects for the protection, recovery, and conservation of forest resources*.



- That the assessed value of the property does not reflect the *real income* and much less the *potential income* from the exploitations.
- That it is necessary to apply confiscatory taxes and strictly apply the law for the protection, conservation, and recovery of the forest resources.

2.a.24 The impact of credit policies

Credit available to the agricultural and forest sector in Paraguay in recent decades has been limited to a simple financing mechanism for foreign-exchange producing agricultural activities. So far there has been no policy focused on specific rural development objectives, much less a policy for sustainable development of forest resources.

Financing of agricultural production assumed significance in the 1970s with an expansionist approach of institutional loans to stimulate more agricultural cultivation and pastures for livestock at the expense of conversion of land with forest coverage.

With respect to public bank financing for small family farms, there is lack of clear guidelines by the Government to support this largest sector in the country. The National Development Bank, the official bank with the largest loan portfolio and coverage in the country, only reaches **15 percent** of the farmers who have some type of loan.

A *credit policy* that stimulates more equitable and sustainable development demands institutional reforms with regulations and procedures that are better adapted to the particular characteristics that the rural producer's needs, especially those relating to forest production because of the long financial maturity of the investments, with greater risks and uncertainties.

2.a.25 The impact of the current state model

The current model of the Paraguayan state is a *producer state* with *centralization* in the approval and execution of policies, a high degree of *intervention* in the market as an active agent and an important stakeholder in the country's economic development. Paraguay needs to invest in a more diversified economy, because its dependence on the farming and livestock sector threatens its long-term sustainability. In this context, the state needs greater organizational, economic, financial, and political capacity to meet the population's growing needs. It is necessary to start a dialogue on a development model that maintains growth but also protects the country's natural capital and diversifies the sources of income and employment. This is a challenge of enormous proportions that the Government of Paraguay is ready and willing to face in the coming years.

2.a.26 The impact of environmental policies

Environmental legislation that had a positive albeit limited effect on forest conservation included **Law No. 716/95**, which defined a number of ecological offenses or environmental crimes in the framework of the new amended criminal code, which struck some fear in the



violators. The legal concept of ecological crime is established in the Constitution in Article 8.3 “*The law will define and establish sanctions for ecological crimes.*”

We can also cite **Law No. 264/93** on Evaluation of Environmental Impact, which requires an environmental assessment for the use of forests, forest plantations, and changes in land use. These laws have contributed to some extent to reduce clearing without a permit, illegal timber operations, the contraband in wood, illegal trade in forest products, damages to biodiversity, etc.

Among the principal factors limiting the effectiveness of environmental legal provisions are insufficient legal knowledge by the population, human resources not trained for the application of environmental laws, weakness in imposing severe penalties on violators, problems in protecting private property, and the degree of corruption that pervades the whole system.

Another environmental law with important positive impact on the conservation of natural forests has been **Law No. 352/94** on Protected Wilderness Areas, which led to the **National System of Protected Wilderness Areas**, that made it possible to preserve important forest ecosystems in the country that were in serious danger of disappearing, although some of these reserves have not yet been formally demarcated, measured, and recorded, which undermines the effectiveness of the system and puts it at risk.

2.a.27 The impact of indigenous policies

The agency responsible for indigenous affairs is the **Indigenous Peoples’ Institute (INDI)**, an independent entity that despite its hierarchical ranking has its existence questioned each year and has severe limitations for carrying out its assistance programs.

Law No. 904 / 81 established the “*Statute of the Indigenous Communities.*” Article 1 of this law guarantees ownership of the land of the indigenous communities and Article 14 provides that “*insofar as possible the current or traditional ownership of the lands shall be respected.*” But legislation to protect the indigenous peoples’ natural heritage does not yet take into account the successful experiences of forest use that they already have in order to take advantage of the ***indigenous community’s relation to habitat*** in forest management. According to the Census of Population and Housing (2002), the indigenous population is **85,674** persons.

2.a.28 Identification of agents causing deforestation

To analyze the processes of change in the national and regional forest coverage in Paraguay we have identified the drivers and most significant agents for deforestation and degradation of the country’s forests.

The determinants of this process of deforestation and forest degradation are the direct causes, the activities that directly affect the forest ecosystem, arising from land use that affects the



forest cover by exploiting the resource or eliminating it for agricultural purposes. The principal determinants of deforestation and degradation of forests at the national level are summarized in *Table No. 13* and *Table No. 14* below:

Table No. 13
Principal Agents and Determinants of Deforestation and Forest Degradation in Paraguay

Drivers	Related agents	Proposed actions	Eastern region	Western region
1. Expansion of the agricultural frontier	Agricultural corporations	Increase productivity in land use	X	-
2. Expansion of pastureland	Ranchers	Increase productivity in land use	-	X
3. Establishment of agricultural settlements	Peasant farmers	Rural land-use planning	X	-
4. Legal and illegal timbering	Lumberjacks and other actors	Simple and efficient control and compliance mechanisms	X	X
5. Use and production of firewood and charcoal	Various actors, agricultural corporations, farmers	Energetic, large-scale reforestation and forestation	X	X
6. Illegal occupation of forest areas	Landless peasant farmers/squatters	Improve control and rural titling/ promote alternative agriculture	X	-
7. Illegal cultivation	Peasant farmers and other actors	Improve control and suppression of illicit arrangements	X	X
8 Urban expansion	Development companies	Improve land-use planning	X	-
9. Forest burning	Ranchers	Plan for management and control of pasture burning	X	X
10. Increased price of commodities	Farmers and ranchers	Economic incentives for forests, schemes of transferrable permits for land	X	X
11. Infrastructure (highway, power, etc.)	Various actors	Mitigation of impacts	X	X

Table No. 14
Causes of Deforestation and Forest Degradation and Underlying Causes

Expansion of the agricultural frontier	Expansion of pastureland	Establishment of agricultural settlements	Legal and illegal timbering	Production of firewood and charcoal	Illegal occupation of forest areas	Illegal cultivation	Urban expansion	Forest burning	Increased price of commodities	Infrastructure (highway, power, etc.)
Direct Causes										



UNDERLYING CAUSES				
Economic factors	Demographic factors	Political and institutional factors	Technical factors	Cultural factors
<i>Market trends</i>	<i>Population growth</i>	<i>Institutional weakness</i>	<i>Access to new technologies</i>	<i>Better access to education</i>
<i>Low value of the forest</i>	<i>Migration</i>	<i>Lack of leadership</i>	<i>Inefficient technology</i>	<i>Better access to education</i>
<i>High opportunity cost</i>		<i>Limited control capacity</i>	<i>Lack of environmental parameters for production</i>	<i>Little appreciation of the forest</i>
<i>Land speculation</i>		<i>Inconsistent public policies</i>		<i>New cultural patterns</i>
<i>Restrictive logistics</i>		<i>Perverse incentives</i>		
		<i>Lack of land-use planning</i>		

Although expansion of the agricultural frontier (mainly for soy cultivation), the expansion of pastureland for the production of beef and dairy products, the demand for firewood for fuel, and the opening of new areas for peasant farmer settlements are clearly the *principal causes* of deforestation and forest degradation in the country, there is a need for better understanding



of the underlying causes and their multiple *interactions* that explain the *trends* in changes in land use.

This R-PP seeks to improve understanding of all the connections between the drivers of deforestation in the context of the economic, social, environmental, and political factors at the national and regional levels, and be a *valid tool* for defining more effective control options based on the required studies.

The high rate of deforestation shown by recent data calls for a deeper analysis of the governance of the country's natural resources. Obvious elements, among others, are the need to strengthen the National Forest Land Register to implement a robust system of forest monitoring that identifies legal and illegal changes in land use.

A program to streamline administrative processes and cut red tape is needed. Another important aspect is the establishment of economic and financial mechanisms to stimulate conservation and sustainable management of forest resources.

The abovementioned problem necessarily leads to the need to supplement and expand the *opportunity cost* studies already begun in the framework of the UNREDD-NJP and finish analyzing them in the second half of 2014. It is necessary to know opportunity costs at the level of the property of small and large soy producers in order to reduce the expansion of the agricultural frontier and the same is true for the livestock sector. This information will also be useful to design modeled reference scenarios.

With respect to sustainability of the production of the country's remaining native forests, the extensive development of forest and environmental legislation in the past decade has not been effective enough to slow deforestation and forest degradation, so it is necessary to analyze their *efficiency* and their correlation with legislation on other productive sectors that also has significant impact on land use decisions. These aspects will be important for the *viability* of future activities in the REDD+ program.

Another relevant aspect is the need to identify *economic mechanisms* and *incentives* that can influence and guide the owner's decisions about changing land use.

The analysis of land tenure, titling, and surveys are also factors that will weigh heavily in governance and effective execution of activities in the framework of the REDD+.

It is necessary to strengthen the execution of the *National Forest Inventory* and the effective implementation of the *National Forest Information System* already designed and established as a unit in the INFONA, in order to have ready access to the official data, providing an efficient mechanism for exchange of forest information. It is also important to integrate the National Environmental Information System with the forest system.



Finally, effective implementation of the various elements of REDD+ will require the *strengthening* of various national, regional, and municipal institutions, as well as private organizations that are involved in the program's implementation.

Budget 2.a Evaluation of land use, causes of changes in it, the forest law, policy, and management						
Main activity	Sub-activity	Estimated costs (Thousands of US\$)				
		2015	2016	2017	2018	Total
Specific studies on sources of deforestation and alternatives for its reduction	Biomass, Reforestation, and Energy Forestation	30	10	5	5	50
	Impact on forest fires, gathering of drought scenarios	20	30	5	5	60
	Impact of power distribution projects	20	10	5	5	40
	Land-use planning studies by region	20	20	5	5	50
Additional economic analyses	Simulation in national accounts of the impact of scenarios for deforestation and reforestation	30	10	5	5	50
	Analysis of opportunity costs for land use of main sources of deforestation by area		20	20		40
	The impact of family subsistence farming and alternatives for increasing productivity	20	10	5	5	40
Control and enforcement of regulations	Gaps and proposed solutions for improving compliance with regulations in the forest, agricultural, and livestock sector	30	10	5	5	50
Total		170	120	55	35	380
Government		30	15	10	10	65
FCPF		80	105	45	25	255
UN-REDD		60				60



2b. REDD+ strategy options

Standard 2b the R-PP text needs to meet for this component: REDD-plus strategy Options

The R-PP should include: an alignment of the proposed REDD-plus strategy with the identified drivers of deforestation and forest degradation, and with existing national and sectoral strategies, and a summary of the emerging REDD-plus strategy to the extent known presently, and/or of proposed analytic work (and, optionally, ToR) for assessment of the various REDD-plus strategy options. This summary should state: how the country proposes to address deforestation and degradation drivers in the design of its REDD-plus strategy; a plan of how to estimate cost and benefits of the emerging REDD-plus strategy, including benefits in terms of rural livelihoods, biodiversity conservation and other developmental aspects; socioeconomic, political and institutional feasibility of the emerging REDD-plus strategy; consideration of environmental and social issues and risks; major potential synergies or inconsistencies of country sector strategies in the forest, agriculture, transport, or other sectors with the envisioned REDD-plus strategy; and a plan of how to assess the risk of domestic leakage of greenhouse benefits. The assessments included in the R-PP eventually should result in an elaboration of a fuller, more complete and adequately vetted REDD-plus strategy over time.

2. b.1 Presentation

The objective of a REDD+ National Strategy is to contribute to the vision of development of Paraguay with elements that permit it to mitigate climate change through the rational use of natural resources, reduce poverty, and stop and/or reverse the loss of forest ecosystems. This will require the identification of financial mechanisms, projects, measures, and policies for comprehensive management at the national level, in the current national and international legal framework.

This construction process will be accomplished in the Development Plan for 2015-2030, which is currently being prepared and discussed.

The Strategy: it is a set of actions and/or policies to reduce emissions from deforestation and forest degradation and conserve and increase carbon stocks. To achieve this objective, the strategy must analyze the direct and indirect causes of deforestation and degradation and propose alternatives for reducing their impact, supporting the construction of a vision of sustainable development over time. This will be constructed in a participatory manner, involving indigenous peoples and residents who make their living from the forest,



particularly. This will be consistent with the Development Plan and work with a 15-year time horizon to 2030.

Construction of the REDD+ National Strategy will be a process for:

- Involving government entities responsible for planning, financial and sector management associated with natural resource management, and the agricultural, livestock, energy, and forestry sectors, among others. Participatory and transparent: It is necessary to construct mechanisms for participation and efficient interagency coordination among the public and private sectors and civil society, ensuring informed participation by the indigenous and peasant farmer sectors.
- Capacity building: There needs to be a line of development and construction of technical capacity, management, and innovation to deal with complex themes such as REDD+ as part of a country's development strategy.

2. b.2 Guidelines for preparation of the REDD+ National Strategy

Paraguay's economy is heavily dependent on the export of commodities or basic products for its national budget, where about 50 percent comes from livestock and soy, among others.

A large percentage of the population, especially in rural areas, engages in agriculture, often for subsistence, and that is where poverty is concentrated. The economy expanded rapidly between 2003 and 2008 owing to the growing world demand for basic products, combined with high prices and a favorable climate that supported the expansion of Paraguay's exports.

Paraguay is the sixth largest soy producer in the world and the eighth largest beef exporter. A drought struck in 2008, curtailing agricultural exports and reducing economic growth, even before the global recession. The economy declined by 3.8 percent in 2009, with lower world demand and low prices for basic products reducing the exports.

Growth rebounded to 13 percent in 2010, the highest in South America, but fell back to about 4 percent in 2011, when the stimulus subsided. In 2012, drought and outbreaks of foot-and-mouth disease reduced the exports of beef and other agricultural products, and the economy shrunk by 0.5 percent.

Barring any event with great impact in 2014, the economy will gradually attain its growth potential.

This situation clearly shows that GDP is heavily dependent on two sectors of Paraguay's economy, livestock and soy. Available information shows that these are drivers of the historic deforestation in the western and eastern regions, respectively.

An in-depth analysis of the existing correlation is needed, and it presents interesting challenges to Paraguay: how to reformulate a development strategy that will permit



development of other sectors and diversify the economy to reduce existing risks and incorporate elements for maintaining and recovering natural capital, especially forests.

The construction of this strategy will require the following key elements:

- Identify the economic impact of the measures in the short, medium, and long terms.
- It must work closely with the agricultural and livestock sector in the country, and with populations dependent on the forests, such as indigenous peoples, peasant farmers, women, and youth.
- Establish a phased scheme of proposals for measurement, testing, and economic impact.

2.b.3 Strategy options to stop the causes of deforestation

Options for stopping the drivers of deforestation involve the identification of multi-actor and multi-level actions that are cost-effective and contribute to land-use planning, ensuring the effective and sustainable management of the country's forests.

Strategy options also contemplate the creation of economic and financial incentives needed to stimulate the efficient use of the land resource in order to reduce the expansion of the agricultural and livestock frontier and promote sustainable forest use of wood as a fuel.

In the process of constructing the REDD+ National Strategy, we have identified nine major strategy options and in preliminary form a series of actions for each of them, as well as the institutions that would be involved in their implementation. These options directly address the identified deforestation drivers; in most cases, the options can deal simultaneously with more than one driver. As we move ahead in the process of preparation and planning for implementation in specific regions and territories, we could consider including other specific actions and other institutions besides those identified initially.

For example, point 3 on economic analysis calls for a study on the measures and their impact on the national economy; this could also make it possible to understand positive and negative impacts on specific sectors.

This classification of strategy options will make it possible to organize and plan the measures contemplated in the REDD+ Strategic Environmental and Social Assessment.



Table No. 15
Strategy Options for Reducing Deforestation and Forest Degradation

Studies / Strategy options	Proposed actions	Description/Justification	Institutions Involved
<p>1.Strengthening of environmental and forest governance</p>	<ul style="list-style-type: none"> • Strengthening the management capacity of public and civil society entities for conservation of the environment, particularly the forests. • Support for the development of technical, legislative, and financial instruments for the environment sector, particularly forests. • Promote the enforcement of legislation to preserve natural forests. • Strengthening of environmental authorities and police in forest areas to exercise better command and control in a coherent and timely manner. • Strengthening of public policy for the use, management, and conservation of natural forests. 	<p>Environmental and forest governance in Paraguay requires support in terms of financial resources and personnel for adequate execution. A central theme for REDD+ will be to seek support for priority initiatives for proper implementation of a REDD+ scheme at the national level</p>	<p>SEAM INFONA MAG STP MH FAPI POJOAJU</p>
<p>2.Land-use planning</p>	<ul style="list-style-type: none"> • Review of existing legal mechanisms at the national level to facilitate land-use planning, proposing immediate options for implementation in key areas of REDD+. • Support for the formulation and implementation of land-use planning instruments in community territories (peasant farmers, indigenous peoples). • Support for the establishment of environmental determinants for land-use and sector planning that includes forest conservation. • Identification of zones of high ecosystem importance, including areas for special management, infrastructure, agriculture, or other high-impact activities. • Development of control measures (taxes, regulations, restriction of incentives, etc.) to support environmental land-use planning. 	<p>There are structural themes on land-use planning that must be addressed. REDD+ will support the elimination of barriers to the implementation of a REDD+ strategic plan.</p>	<p>SEAM MAG INFONA STP MH FAPI POJOAJU</p>



<p>3.Economic analysis</p>	<ul style="list-style-type: none"> Development scenarios and simulation to 2030 of REDD+ strategies by region, source, and reduction measure 	<p>Paraguay's economy is commodities-dependent and it is necessary to closely analyze the negative impact of measures on reduction of the GDP</p>	<p>SEAM INFONA MAG MH FAPI POJOAJU</p>
<p>4.Innovative financial mechanisms</p>	<ul style="list-style-type: none"> Study on a REDD+ Fund to manage resources 	<p>Schemes of funds for distribution of resources have had good results in other countries, so it is necessary to determine the viability of a multi-window fund in Paraguay.</p>	<p>SEAM MH BCP</p>
	<ul style="list-style-type: none"> Public/private/international financing sources Identify mechanisms to encourage green loans that have an environmental assessment 	<p>It is necessary to identify sources of resources in the private agriculture, livestock, and energy sectors as well as public sources. International banks are incorporating green loans that have an environmental assessment and it is necessary to determine the potential of Paraguay's banking system for creating these green windows</p>	<p>STP MH BCP</p>
	<ul style="list-style-type: none"> Accountability system for transfer of reduction units 	<p>Identify the mechanism for quantification, register, and transfer of REDD+ reduction units.</p>	<p>MH STP SEAM</p>
	<ul style="list-style-type: none"> Analysis of legislation for carbon credits / (REDD) 	<p>Associated with the initiative for transferable reforestation permits</p>	<p>SEAM INFONA</p>
<p>5.Reduction options</p>	<ul style="list-style-type: none"> Program for energy reforestation and its impact on the use of biomass and resulting impact on CO₂ emissions. 	<p>70% of the firewood extracted is for energy use in rural areas. The biomass supply comes in 50% of native forests with the impact on carbon emissions. The goal is to replace 25% with energy reforestation.</p>	<p>SEAM INFONA MOPC</p>
	<ul style="list-style-type: none"> Program for forestation, reforestation, and restoration of ecosystems in the fight against extreme poverty. 	<p>Evaluate whether forestation, reforestation, and restoration programs can be viable for generating income for extremely poor sectors in the eastern section of the country given the growing demand for firewood from the plantations.</p>	<p>SEAM INFONA SAS STP INDI FAPI POJOAJU</p>



6. Agricultural and livestock sector	<ul style="list-style-type: none"> • Institutional strengthening to optimize procedures and compliance with regulations: agricultural, forest, planning, justice, and SEAM. • Identification of gaps in institutions responsible for improving the enforcement of regulations on: <ul style="list-style-type: none"> • Illegal deforestation • Illegal trade in firewood • Firewood as a fuel from the native forest • Others 	There is a limitation in the responsible institutions that must be precisely identified to comply with existing regulations because of the need to cover extensive territory and coordinate with judicial bodies to apply penalties in a timely manner.	SEAM INFONA MAG MJT MOPC
	<ul style="list-style-type: none"> • Scheme of incentives on best agricultural and livestock practices, certifications, and market access 	Link the best practices, carbon footprint, and certification with access to international markets and sustainability of the sectors over time and propose a system of incentives and transformation of the sectors in the medium and long terms	SEAM INFONA MAG MIC
	<ul style="list-style-type: none"> • Strengthening the National System of Protected Areas 	Promote conservation activities such as biological corridors in the eastern and western sectors, and other initiatives	SEAM INFONA MAG FAPI POJOAJU
	<ul style="list-style-type: none"> • Schemes for intensive livestock production and potential incentives (agro-forest-pastoral systems) 	Identify viable levels of intensification and reduction of the associated agricultural frontier expansion, proposing mechanisms with command and control incentives and market incentives	MAG SEAM INFONA
	<ul style="list-style-type: none"> • Support for medium and small (subsistence) farmers, incentives for agroforest systems 	The peasant farmer sector needs technical and financial assistance to increase productivity and income. It is necessary to understand the demand and impact in terms of poverty reduction and reduction of deforestation.	MAG SEAM POJOAJU
7. Testing of measures	<ul style="list-style-type: none"> • Market for compensation of tradable permits of PES/REDD 	Proposal being developed and ready for initial testing	SEAM MH STP
	<ul style="list-style-type: none"> • REDD+ pilot program in the western region 	The initiatives prepared are part of a pilot program by region that needs to be field-tested to correct any problems and then expanded in coverage	SEAM INFONA INDI FAPI POJOAJU



	<ul style="list-style-type: none"> REDD+ pilot program in the eastern region 	The initiatives prepared are part of a pilot program by region that needs to be field-tested to correct any problems and then expanded in coverage	SEAM INFONA INDI FAPI POJOAJU
8.Strengthening of the related legal framework	<ul style="list-style-type: none"> Proposal of a legal framework for implementing selected measures 	It is also necessary to identify legal gaps in the implementation of initiatives and possible courses of action to correct them.	SEAM INFONA INDI Poder Judicial MJ
	<ul style="list-style-type: none"> Social carbon forest certification 	Incorporate it in the process of sustainable forest management under the Forest Stewardship Council (FSC), include a social carbon component as a local and international incentive for wood from managed forests	SEAM INFONA INDI FAPI POJOAJU
9.Proposal for improving management of the national system of protected areas and buffer zones.	<ul style="list-style-type: none"> Proposed alternatives for sustainable production for the population living in buffer zones adjacent to the National System of Protected Areas (SINASIP). Encouragement of management of neighboring and adjacent areas of the Protected Areas to develop their buffer function. 	There are topics related to management of protected areas that are in process and support for them will be sought from REDD+. However, these problems are not expected to be solved with REDD+ financing.	SEAM INFONA INDI FAPI POJOAJU

Prioritization of strategy options in all levels will provide permanent feedback of the results and measures and will take into account the application of the country's social and environmental safeguards. The strategy options will be discussed in the first instance in the discussion vehicles established in Component 1a; they can be discussed in all pertinent entities and feedback mechanisms will be established.

The institutions indicated in Table 15 as involved in the implementation of the proposed strategy options have been identified as initial forums without limiting the participation of institutions/organizations that may be identified during the implementation of the R-PP.



2.b. 4 REDD+ regional pilot programs (PPRR)

The PPRR are programs developed as a result of the analysis of each region's particular situation, principal causes of deforestation and degradation, the discussion on command and control measures (forest governance) and incentives, and the development of projects or support for initiatives already underway. Measures, actions, and their scope will be prioritized based on their impact in terms of probable reduction of emissions, deforestation, and degradation, and their contribution to poverty reduction and the development of Paraguay.

Once the PPRR are defined, they will comply with the requirements of existing legislation in terms of identifying possible environmental, social, and cultural impacts and will be prepared in close coordination with the indigenous/peasant farmer sector, under the REDD+ coordination scheme proposed in Component 1. The criteria for the development of the PPRR are presented in Component 2c.

Characteristics of the analysis show that each region needs different treatment; for example, soy production has caused deforestation in the eastern zone and livestock is the problem in the western zone, while wood is used for energy in both regions, however, it now seems that soy production is gaining in the western region.

The strategy will seek to understand the exact relationship between the soy and livestock sector and the rate of deforestation; for this purpose the opportunity costs and the behavior of international prices of both commodities will be relevant, among other variables. Since firewood from native forests is an input in the production chain in both sectors, its price impacts the final price of both products. Therefore, any attempt to replace firewood as a fuel source will have an impact on these sectors. Understanding better how potential measures could affect this dynamic will make it possible to evaluate which of them should be implemented and how, in order to reduce pressure on forests without any drastic impact on the principal factor in Paraguay's GDP.



Table 2b: Summary of activities and budget (or framework of results) of the REDD+ strategy

Main activity	Sub activities	Estimated cost in US\$ (thousands)				
		2015	2016	2017	2018	Total
Economic analysis	Development scenarios and simulation to 2030 of REDD+ strategies by region, source, and reduction measure	10	20			30
Innovative financial mechanisms	Implementation mechanisms Study on REDD+ Fund for resource management (Forest Fund, Environmental...)	10	20			30
	Private/public financing sources	20	10			30
Reduction options	Analysis of legislation for carbon credits/ (REDD)	5	20			25
	Program for energy reforestation and its impact on the use of biomass and resulting impact on CO ₂ emissions	5	20	20	10	55
	Program for forestation, reforestation, and the fight against extreme poverty	10	20	20	10	60
Agricultural and Livestock sector	Institutional strengthening for compliance with the REDD+ standards	10	20	15	5	50
	Scheme of incentives on best agricultural and livestock practices, certifications, and market access	10	10	5	5	30
	Schemes for intensive livestock production and potential incentives	5	15	15	5	40
	Support for medium and small (subsistence) farmers, incentives for agroforest systems	10	20	5	5	40
Testing of measures	Market for compensation of tradable permits of PES/REDD	5	10	5		20
	Pilot program in the western region	10	90	100	100	300
	Pilot program in the eastern region	10	90	100	100	300
Legal framework	Proposal of a legal framework for implementing selected measures	5	20	10	5	40
	Social carbon forest certification		10	5		15
	Land-use planning.	5	10	5	5	25
	Strengthening of environmental and forest governance, control of deforestation, and application of penalties.	10	30	30	10	80
	Proposal for improving management of the national system of protected areas and buffer zones	5	10	10	5	30
Total		145	445	345	265	1200
Government		45	45	45	30	165
FCPF		60	400	300	235	995
UN-REDD		40				40



2c. REDD+ Implementation Framework

**Standard 2c the R-PP text needs to meet for this component:
REDD-plus implementation framework:**

Describes activities (and optionally provides ToR in an annex) and a work plan to further elaborate institutional arrangements and issues relevant to REDD-plus in the country setting. Identifies key issues involved in REDD-plus implementation, and explores potential arrangements to address them; offers a work plan that seems likely to allow their full evaluation and adequate incorporation into the eventual Readiness Package. Key issues are likely to include: assessing land ownership and carbon rights for potential REDD-plus strategy activities and lands; addressing key governance concerns related to REDD-plus; and institutional arrangements needed to engage in and track REDD-plus activities and transactions.

2. c.1 Institutional framework for the REDD+ strategy

The REDD+ strategy will be conceived and implemented in the context of the country's national development priorities. These priorities are related to climate change in three basic ways:

1. The institutional structure to address climate change,
2. The role of the environment, particularly forests, in actions to mitigate the effects of climate change, and
3. International commitments on climate change that have been signed by the state.

Preparation of the REDD+ national strategy will involve the following institutions, whose institutional objectives have already been described in Component 1a, which are part of the Policy Committee and National REDD Technical Group, structures proposed on the basis of lessons learned in governance in the UNREDD-NJP. A major role in preparing the strategy will also be played by the National Environmental Council and the National Program on Climate Change, in view of the nature of their mandates and the plurality of their makeup.

The institutions initially involved will be:

- a. The Environment Secretariat (SEAM): as the environment authority and focal point of the United Nations Framework Convention on Climate Change.
- b. The National Forestry Institute (INFONA): as the authority responsible for the application of forest legislation.
- c. The Technical Secretariat for Planning (STP): as the national agency in charge of the National Development Plan.



- d. The Ministry of Agriculture and Livestock (MAG): as the national agency in charge of agricultural policy.
- e. The Ministry of Finance (MH): responsible for the economy at the national level.
- f. The Paraguay Indigenous Peoples' Institute (INDI).
- g. The Federation for the Self-Determination of Indigenous Peoples (FAPI)
- h. The Paraguay Association of NGOs (POJOAJU): brings together civil society organizations.

The process of preparing the strategy will also involve other relevant stakeholders, such as associations of producers, the financial sector, and the private sector.

It is important to note that civil society (nongovernmental organizations representing youth, women, indigenous peoples, and peasant farmers) will be involved to guarantee that the process addresses questions of gender or unequal benefits that could block the well-being of social groups (especially communities that depend on the forests, women, youth, and peasant farmers). The Government of Paraguay recognizes the importance of the key groups, and therefore they will be sure to be adequately represented, as described in Component 1b.

2.c. 2 Legal aspects related to the preparation of the REDD+ national strategy

Previous components 1 and 2 have described in detail the national legal framework for the preparation of the National Strategy for the Reduction of Emissions from Deforestation and Forest Degradation. The principal laws cited have been attached, with the institutions responsible for their application.

Some questions concerning the legal framework remain to be considered and dealt with during the implementation of the R-PP, among them: Recognition of the REDD+ carbon credit as a security that can be traded on the stock exchange, whether carbon is defined as an environmental service that can be owned, what legal situation is needed with respect to land tenure to permit involvement in REDD+, how national public and /or private pilot projects can be implemented, in which region, and what is the arrangement for participation by the relevant stakeholders.

2. c.3 REDD+ implementation framework

In 2012, after approval of the National Policy on Climate Change, a proposal was drafted for the National Mitigation Strategy, prepared following the guidelines of the National Policy on Climate Change of the Republic of Paraguay. The National Policy on Climate Change, Phase I Mitigation, proposes to develop interrelated action plans as components of the Plan that follow the guidelines and priorities established in the National Policy on Climate Change. The plans proposed are: the Plan of Action of Inventories and Management of Emissions, the Plan of Action for Appropriate National Mitigation Actions (NAMAs), the Plan of Action for Strengthening Capacities for Implementation of the National Mitigation Strategy, and the development of a REDD+ national strategy.



As noted above in previous components, this proposal is based on the progress of the UNREDD-NJP; additional support is needed to complete the studies and diagnostics. This process will have high participation by relevant stakeholders on the interagency agreements required to implement REDD+ at the national level.

These necessary actions to supplement the UNREDD-NJP include the following:

- Strengthen and expand the existing governance structure for REDD+ at the national level and give it the necessary legal underpinning, based on the existing scheme, ensuring adequate mechanisms for interagency coordination, taking into account the crosscutting nature of the theme.
- Prepare the required legislative proposals for the implementation of the REDD+ mechanism in the country, based on actions already identified.
- Strengthen institutional partnerships related to reordering of the national land register and propose specific measures for records of forest land.
- Draft regulations and procedures for the application of the REDD+ mechanism in the country.
- Establish selection criteria and identify potential areas for pilot programs differentiated by region. Identify key partners, define their roles and responsibilities, and ensure the adequate involvement of the stakeholders.
- Identify alternatives and sources for a flow-through fund for REDD+.
- Propose equitable forms of distribution of the benefits generated by carbon sequestration.
- Identify financing sources and establish pilot business plans for marketing carbon credits.
- Assign economic value to the economic, social, and environmental impacts of the REDD+ national strategy.
- Study and propose the required institutional agreements and establish pilot implementation mechanisms.

2c.4 Priority actions

Effective implementation of the activities requires suitable mechanisms to ensure the development of the strategic guidelines defined in Component 2b, credible and transparent governance arrangements, and the necessary institutional, economic, and legal arrangements so that the country can implement the options provided in the REDD+ strategy.

The strategy's implementation will directly involve institutional, sociocultural, economic, productive, and environmental aspects, integrating them simultaneously and in a complementary manner so that the strategy can meet its objectives and result in the substantial change that is needed for effective reduction of deforestation and forest degradation.



2.c.5 REDD+ regional pilot programs (PPRR)

Since the country is divided into two very different regions, it is necessary to implement two REDD+ pilot programs, one in the eastern region and the other in the western region, taking into account the specific circumstances of each region.

At the national level, the institutions in the REDD Technical Group will evaluate the necessary actions for implementation of the pilot programs, in coordination with the regional platforms.

The criteria to be considered for the implementation of these PPRR will be developed during the implementation of the initiative, taking into account the descriptive aspects in Component 2b and those mentioned below, but not limited to them because the results of the various diagnostics and studies to be completed during the implementation of this initiative and in the UNREDD-NJP are needed:

1. Opportunity costs: the different opportunity costs for land use will determine the type of measures to be implemented in each area or region.
2. Level of threat to the forest: Areas threatened and options for countering it.
3. Safeguards: international treaties and conventions will be honored. Actions are consistent with conservation of natural forests, biological diversity, social benefits, and human rights.
4. Tenure: Land tenure is clearly established, with particular consideration of the aspects related to the Inter-American Court's judgments on indigenous territories.
5. Size of forest areas: areas that could be expanded.
6. Carbon level per hectare: high carbon levels make an area more attractive.
7. Governance: institutional capacity to manage specific social, environmental, and financial aspects of REDD+ projects.
8. Risk of spreading: low potential of displacements of deforestation to other areas.
9. Replication potential: the strategies and actions can potentially be replicated in other zones.
10. Community benefits: actions to be executed have a potential impact of poverty reduction taking into account social and cultural factors of the forest-dependent populations, especially indigenous peoples, women, youth, and small peasant farmers.
11. Relation to other environmental services: the project area supports many environmental services with market potential.
12. Willingness of the stakeholders: the stakeholders support implementation of the activities to be executed, taking into consideration where necessary the prior free and informed consent of the indigenous communities for the implementation of the PPRR.
13. Availability of information: potential to fill information gaps, considering social and cultural aspects.
14. Biodiversity: the actions will maintain a high level of biodiversity.
15. Ecosystem services: high potential for ecosystem services.



Among the activities that will be carried out to implement the REDD+ regional pilot programs are the following:

2. c.5.1 Management and coordination

- a. The program/project must be designed by a team with in-depth knowledge of the different areas: participation processes, project management, forest legislation, and the technical aspects that will add value to the forest resources, such as: forest certification, PES, and forest carbon.
- b. It is necessary to develop institutional structures that will implement compensation and equitable distribution mechanisms for the benefits generated by carbon capture.
- c. Cooperation arrangements will be made with partners who are knowledgeable about the various themes. The roles of and links to these partners need to be well defined.
- d. The organizational structure should not be complicated but as simple as possible, with the ***REDD+ Technical Group, together with the regional platforms and the support of the REDD+ Operational Unit*** would lead the process with the key partners defined.

2. c.5.2 Technical component

All the available information needs to be computerized to identify carefully the gaps in key information. It is necessary to do ***specific studies***, such as the flow of funds for REDD+, criteria for the definition of pilot areas, development of the baseline (deforestation, degradation, biodiversity), estimate of opportunity costs, development and implementation of the monitoring system, acquiring of images, preparation of maps, etc., which need to be costed in detail.

2. c.5.3 Financing sources for the PPRR

A ***detailed budget*** will be prepared for each program, both in the preparation phase when compensation funds are not yet available, and in the implementation phase, which will consider data from the studies executed and incentive plans previously implemented. That budget will cover the cost of necessary studies, identification of financing sources, a business plan for marketing carbon credits, consultation workshops, training, a dissemination and communication campaign, etc.

2. c.5.4 Key stakeholders

For governance and the program's success it is necessary to connect from the start all stakeholders involved in the process: government agencies, civil society, indigenous peoples, women's groups, youth, small farmer communities, and entities that have had some presence in the area of the project, which can give credibility and help with the strategy of introducing the theme and consulting on it. In this case, it is advantageous to have in place the regional platforms that with the support of the operational unit will become ***leading structures*** that clarify the roles and responsibilities of the stakeholders in the project.



2. c.5.5 Ownership of the land and the carbon

In the framework of implementing the UNREDD-NJP there has been an analysis of the indigenous lands and territories in order to assess the current situation and cases of claims of land and territory by indigenous peoples (mapping of claims; what cases are pending in which zones, and the trends) and to have a proposal to formalize indigenous ownership of land and territories. The conclusions will be available in the last half of 2014.

There has also been a legal analysis of aspects related to land tenure in Paraguay and carbon ownership, in which the principal conclusions are that at the national level land ownership (public or private) is the deciding factor for determining ownership of the carbon present in the vegetation, because the property is immovable with land and all the solid or liquid elements in its surface or depth, all that is incorporated in the soil organically (such as trees and other vegetation) and all that is under the soil but not placed there by humans (Art. 1874, Civil Code of Paraguay).

In the same sense, the law also provides that ownership of a thing simultaneously entails the ownership of the accessories found in it, attached by natural or artificial means. All constructions, plantations, their natural products, civilian and industrial, products and works existing in the surface or inside a property, although separated, belong to the owner, unless by special legal arrangement they belong to the usufructuary, lessee, or another (Art. 1962, Civil Code of Paraguay).

It is necessary to do a legal analysis of air rights and subsoil rights, which are not yet contemplated in Paraguay's legislation but have been used in other countries. There is specific legislation for the mining sector, petroleum, and gas that can help determine if specific legislation is needed for carbon.

Pursuant to Art. 64, "The indigenous peoples have the right to community ownership of the land, with sufficient area and quality for the conservation and development of their particular lifestyles. The State shall provide these lands to them without charge, which shall be unencumberable, indivisible, untransferable, imprescriptible, insusceptible, not used to guarantee contractual obligations or rented; they shall also be tax-exempt."

Thus there is community property that also could be associated with carbon rights once the best legal alternative is established for Paraguay.

The preliminary conclusions of the analysis on carbon ownership done in the framework of the UNREDD-NJP mention that lacking a law that specifically regulates ownership of carbon, Paraguay must fall back on the general rules on assignment of property rights established in the Civil Code.



These rules clearly state that ownership can be public or private depending on where the carbon is found. With respect to private property, the owner of the land in principle owns the carbon.

There are other situations that also permit assignment of ownership of this element: usufructuaries, lessees, and good-faith possessors also have ownership of the carbon and while they are in charge of the land they displace any other person with rights to it.

Similarly, peasant farmers and indigenous communities own the carbon on the land they possess. An important gap in the legislation is the absence of rules that establish a register of emission reduction projects, require the proponent to guarantee their execution and duration, and make these projects enforceable to third parties.

2. c.6 Carbon monitoring

Preparation of the proposal will include strengthening a carbon monitoring system based on activities already initiated by the UNREDD-NJP. That scheme must ensure a comparative evaluation of emissions reduction and relate it to ownership and control of the forests. This structure is intended to ensure the control and monitoring of the carbon benefits and during this process tools will be developed for the collection and organization of carbon data.

One of the needs identified is the strengthening of the capacities of the offices and regional centers of the SEAM and the INFONA, through training the assigned personnel and providing the equipment needed for their work. The information to be generated will be integrated in the National Forest Information System and linked to the Environmental Information System to provide a single database with the national data. The activities related to the strengthening will be described in Component 4.a.

2. c.7 Multiple benefits and distribution of benefits

At the national level, identification of forests' multiple benefits is still at the preliminary stage. There has been progress in mapping potential deforestation, compiling existing data at the global level on multiple benefits prioritized for Paraguay, and the mapping of sacred sites in Paraguay. Final results are expected in the second half of 2014 in order to explore what are the most appropriate schemes for effective distribution of benefits at the national level.

In the selection of appropriate schemes, special attention will be given to the social and cultural factors of forest-dependent populations, particularly indigenous peoples, women's groups, youth, and communities of small farmers.

2. c.8 Existing and required schemes and financing sources

Various funds have been established at the national level, such as the environment, forest, and wildlife funds, which are not operational although they have legal status, because they lack resources for their implementation. The UNREDD-NJP has begun to analyze existing



structures to see which might be the best suited for use with the REDD+ mechanism, and possible sources of financing to make them operational.

In terms of financing, as described in Component 2a, the country's banks have credit products for sustainable investment, but in limited demand, in which the private sector plays the dominant role because public banks base their financing policy on the demand of the private sector. Although there are many public and private financial entities, there are practically no long-term credits for investments needed for adequate sustainability and mitigation of the negative effect of greenhouse gasses.

At the international cooperation level, the national government has received bilateral cooperation from Japan in the Forest Preservation Initiative, which has benefited SEAM, INFONA, and the National University of Asunción in activities related to the strengthening of the environmental information system, supplying equipment and vehicles for the regional offices for monitoring and collecting information for the National Forest and Carbon Inventory, and construction of a laboratory for the analysis of geographical information on climate change, REDD, water, and biodiversity.

United Nations agencies cooperate with actions related to REDD+ through implementation of the UNREDD-NJP and the Green Commodities initiative with financing from the Global Environment Facility with support from the UNDP.

Both the IDB and the GIZ finance REDD+ activities at the global level, but they are not engaged in any activities with the Government. The German Government is carrying out an initiative called PARLU jointly with WWF Paraguay.

When the REDD national coordination structure is established it will be important to channel financing of cooperation and national sources through this structure for effective planning of the required activities.

2.c.9 Proposed actions

Effective implementation of the REDD+ national strategy requires the actions described above, supplemented with:

- a. Additional studies on schemes for agricultural, livestock, and forest certification, including analysis of commodity markets with best practices and accounting for the carbon footprint that adds value to national production, and strengthening of public certification mechanisms. Analysis of the existing legal framework to incorporate criteria related to the carbon footprint, REDD+ certificates, and legal definition (securities). Paraguay must be able to offer schemes for certification of carbon footprints, best practices, corporate social responsibility, and other schemes to enable the private sector to differentiate itself and enter specific markets with better conditions.



- b. Support for the development and discussion of the implementation of the National Development Plan 2015-2030, particularly the components related to the REDD+ national strategy and climate change, including a discussion of development schemes with low carbon emissions.
- c. Expand and encourage dialogue and discussion about carbon rights, ownership of land and territory, and revisions in legislation that may be required.
- d. Strengthen schemes for implementation of REDD+ through the development of national capacities in economic, technical, and national and international policy aspects, including aspects related to international negotiations.
- e. Support participation in international meetings.
- f. **Entry to international markets for Paraguayan products:** One of the incentives to be analyzed is access to markets, among them the European Union, the United States, and regional markets such as Brazil, Chile, and Argentina for products associated with high rates of deforestation. It is necessary to have the carbon footprints of the export products and identify new trends in international requirements regarding them. It is necessary to better understand how the export of Paraguayan products can benefit from and/or comply with new requirements, or reduce the products' carbon footprint. It is also necessary to identify upscale markets that require standards of best agricultural and livestock practices.

The budget in the following table indicates the aspects that will be strengthened in this preparatory phase of REDD+. The most important aspects are those for generating capacities, defining rights, and surveys and institutional arrangements for the application of REDD+.



Budget 2c. REDD+ implementation framework						
Main activity	Sub activities	Estimated cost in US\$ (thousands)				
		2015	2016	2017	2018	Total
Additional studies	Studies on agricultural, livestock, and forest certification schemes	5	20	5		30
	Analysis of commodity markets with best practices, carbon footprint	5	20	5		30
	Strengthening of public certification entities	5	10	10	5	30
Legal framework	Carbon footprint, REDD+ certificates, analysis of legal definition (securities)	5	10	5		20
	Support the development and discussion of the National Development Plan 2014-2030 in the climate change-REDD component	10	10	5		25
	Discussion of development schemes with low carbon emissions		10	10	5	25
	Support discussion of legislation required on carbon rights, ownership of land and territory	5	5	5		15
Strengthen the scheme of REDD+ implementation	Development of capacities in economic, technical, and national and international policy themes	30	20	20	20	90
	Participation in international meetings	10	10	10	5	35
Total		75	115	75	35	300
Government		10	35	15	10	70
FCPF		25	80	60	25	190
UN-REDD		40				40



2d. Social and Environmental Impacts during Readiness Preparation and REDD-plus Implementation

Standard 2d the R-PP text needs to meet for this component:

Social and environmental impacts during readiness preparation and REDD-plus implementation:

The proposal includes a program of work for due diligence in the form of an assessment of environmental and social risks and impacts as part of the SESA process. It also provides a description of safeguard issues that are relevant to the country's readiness preparation efforts. For FCPF countries, a simple work plan is presented for conducting the SESA process, cross referencing other components of the R-PP as appropriate, and for preparing the ESMF.

2.d.1 Background

This component of the REDD+ proposal will address the environmental, social, and cultural priorities arising from the process. For these purposes, the Strategic Environmental and Social Assessment (SESA) monitoring group will be created, following the intersectoral coordination procedures and mechanisms to be defined on a participatory and inclusive basis by the stakeholders.

During this REDD+ preparation phase, extensive work will be done with forest-related sectors, in addition to early dialogue on the social, environmental, and cultural risks, and the benefits that need to be taken into consideration in the national REDD+ strategy, and the listing and analysis of stakeholders to be included in the SESA monitoring group.

The participatory process of this “due diligence” stage will take account of the analytical work done by stakeholders using analytical criteria for the SESA that include free consultation; the inclusion of indigenous communities, peasant farmers; women, young people and the elderly; community decisions, concerns, and doubts; and the safeguards that are most appropriate for the territories and peoples concerned.

The procedure requires members of the SESA monitoring group to be individuals with decision-making capacity who genuinely represent sectors linked to REDD+, and who have local leadership status and exercise their competencies. The group should guarantee the country a fair, honest representation with gender and intercultural equity, and capacity to disseminate decisions.



The members chosen would be expected to have knowledge of REDD+ issues, to have worked in the process, to have capacity to contribute and to provide leadership committed to the purpose and aims of REDD+, because it is in this mechanism that the safeguards to be included in the program will be chosen and developed, along with the actions needed to ensure their compliance.

The key aims of this component are:

- Early dialogue with key stakeholders
- Definition of the baseline
- Definition of SESA options and policies
- Dissemination of and consensus on SESA implementation policies
- Analysis of potential risks in the strategic options proposed for REDD+
- Effective systems of participation by key and vulnerable stakeholders
- Evaluation of cultural impacts and human rights including free, prior, and informed consent (FPIC)
- Evaluate the opportunity costs of land uses
- Preparation of the SESA results report
- Dissemination of the SESA report
- Dissemination of the Environmental and Social Management Framework (ESMF) and consensus with key stakeholders on its benefits and risks
- ESMF mitigation measures and management options
- Arrangements to address ESMF social, environmental, and political impacts
- Preparation of the ESMF report
- ESMF dissemination
- ESMF implementation

2d.2 Institutional arrangements for SESA management

The process of defining the institutional arrangements for the preparatory process should include the definition of institutional arrangements for SESA management. This component will initially be coordinated with the Technical Group; and adjustments will be made as necessary as the program unfolds. The entity responsible for this process will coordinate governmental and extra-governmental efforts, to involve the largest possible number of stakeholders who are positively or negatively affected by the actions and policies.



The expected role and composition of the SESA group is detailed further in this section. The expected role and composition of technical REDD+ national committee is detailed in page 17 of the R-PP.

They have very different roles: the first one is focused on the SESA only and has not been created yet, the second one is in charge of the daily implementation of the REDD readiness process in Paraguay. It has been in charge of implementing the UN-REDD National Program so far, with the active participation of SEAM, INFONA and FAPI, and it is proposed to expand this group to include other important bodies such as INDI, MH, STP, and Ministry of Agriculture for the implementation of the UNDP-FCPF project.

In terms of composition, it can be anticipated that some institutions will participate in both instances, such as for instance SEAM, INFONA, FAPI, and probably INDI, STP and Ministry of Agriculture. This will obviously contribute to speed-up the processes and facilitate appropriation and delivery of results.

The working relationship per se, between the SESA group and the technical REDD+ national committee will be discussed and clarified during a participative process. It is to be expected that the SESA group will be given the responsibility by the technical REDD+ national committee to lead on the elaboration of the all SESA process, will be guided by this technical REDD+ national committee, and will have to report back to the political committee.

The National REDD+ Technical Group will define the technical guidelines for the REDD+ Operational Unit, and studies conducted by the team of the operating unit, would serve as input for the SESA process. The mechanism for exchanging information between different units / committees, will be defined at the beginning of the implementation of the activities.

It is to be noted that as a result of the midterm revision of the UN-REDD National Program, a detailed analysis and mapping of stakeholders is taking place in Paraguay right now, which will provide valuable information to discuss about the exact composition of the SESA group.

2d.3. Definition of stakeholders or stakeholder groups

The updating of the stakeholder map will more effectively identify groups involved in the management and conservation of forests, along with other stakeholders identified provisionally as deforestation agents. These are the people with whom the consultation on the social and environmental impacts of the strategy options and policies will begin. The studies needed to underpin the analysis will also be identified.

2d.4. Preparation of /consensus on the SESA implementation plan

Having defined the stakeholders, consensus will be sought with them for SESA development. The first steps will involve defining the options and policies to be evaluated, after which the main studies that can underpin the discussion and conclusions will be identified.



2d.5. Identification and undertaking of studies

In this stage, studies will be identified and conducted to underpin the discussion of the impacts, along with the specific studies needed to evaluate impacts on issues identified with the stakeholders.

2d.6. Analysis and evaluation of social, environmental, and cultural impacts

The results of the studies will be used to make a more in-depth analysis of the social, environmental, and cultural impacts; and an evaluation will be made. For this purpose, a template will be prepared compiling all elements of analysis, along with the evaluation criteria, in which the indicators will be defined for their objectivity. A feedback process with key stakeholders will be important at this stage. The mechanisms used will be focus groups, consultations, studies, and evaluation methods implemented by the operational policies.

2d.7. Dissemination of the results of the evaluation

The evaluation and its results will be disseminated through the consultation process specified in component 1c. Here, recommendations will be sought to help define the steps needed to prepare the national framework for managing environmental, social, cultural impacts, taking account of the safeguard policies suggested by the World Bank, the UN-REDD guidelines, and any other schemes considered necessary.

2d.8. Preparation of the national SESA report

The report produced as a result of the SESA will serve as the starting point for defining the framework for managing the social and environmental impacts generated by the REDD+ strategy. This will be done through the ESMF.

2d.9. Preparation of the ESMF

The purpose of the ESMF is to define procedures for managing potential environmental, social, and cultural impacts. Participation by stakeholders and feedback with them is fundamental to make this process valid.

The content of the SESA and ESMF is defined by the following at least:

- Report on the negative risks and benefits of the strategy options prioritized by stakeholders.
- Mitigation measures and risk management options.
- Arrangements for addressing the social, environmental, cultural, and political impacts.



The implementation of this component will draw on the following documents:

- Guidelines issued by the Federation for the Self-Determination of Indigenous Peoples (FAPI) for implementing the National Joint Program (NJP) in indigenous territories (UN-REDD)
- The Proposed Protocol for a Consultation and Consent Process with the Indigenous Peoples of Paraguay
- Guidelines on the involvement of REDD+ stakeholders emphasizing the participation of indigenous peoples and forest-dependent communities
- Social and environmental principles and criteria (SEPC)
- UN-REDD guidelines on FPIC

2.d.10 Propose workplan for SESA and ESMF

The elaboration of a detailed work plan for the SESA and ESMF will be done through a participative process. This will be one of the first results to be produced by the future UNDP-FCPF project after its initiation.

The SESA work plan will most likely contain the following elements or steps:

- I. Detailed stakeholder analysis (identification and characterization, definition of roles and interests): As a result of the midterm revision of the UN-REDD National Program, a detailed analysis and mapping of stakeholders is taking place in Paraguay right now, which will provide valuable information to discuss about the exact composition of the SESA group. It is to be expected that the following entities will be represented within the SESA and ESMF committee: SEAM, INFONA, FAPI, INDI, MH, STP, Ministry of Agriculture, as well as probably representatives from the soy and cattle productive sectors, Vice Ministry of Energy and Ministry of Infrastructure, amongst others. Existing platforms will also be considered, such as the one focused on environment within the Congress, or the ones dealing with commodity production in Paraguay.
- II. Strengthen of these existing platforms: UNDP-FCPF, the existing UN-REDD National Program as well as other related initiatives such as the GEF funded Green Commodity project will coordinate their efforts to strengthen the different existing platforms at the national and sub-national levels, in order to foster dialogue between actors, sectors and at different levels towards the definition of a national REDD+ strategy and its SESA and ESMF.
- III. Generation and validation of information: the stakeholder engagement strategy, in coordination with the SESA process, will include interviews, meetings, discussions, workshops, with key actors, to generate and validate the information produced from the UNDP-FCPF projects as well as from any other support.
- IV. Work with Indigenous People: the UNDP-FCPF project will build on the already existing relationship with FAPI and INDI, with an aim to articulate and coordinate activities, from a thematic and geographic perspective. The already existing protocol for consultation will be used when needed, according to the REDD+ strategic options identified and prioritized by Paraguay.



- V. Elaboration and implementation of a SESA action plan: this plan will be part of the stakeholder engagement strategy, under elaboration in Paraguay. It will be integrated into a wider process, not limited to REDD only, but directly connected to the Vision 2030 for Paraguay that the new government is elaborating. this SESA and ESMF work plans will have to include a specific timeframe as well as a dedicated budget. a preliminary version will be presented in the project document to be signed between UNDP and SEAM.
- VI. SESA products: the ESMF will be produced simultaneously to the national REDD+ strategy, and will be the end product of the SESA process. It is expected this SESA process will also provide valuable information that will be considered when working on the SIS to be submitted to the convention.

Budget 2d: SESA Implementation						
Main Activity	Sub-Activity	Estimated Cost (thousands of US\$)				
		2015	2016	2017	2018	Total
SESA Analysis	Socioeconomic baseline in REDD-plus areas	20		20		40
	Evaluation of human rights related to indigenous lands and territories	10	20	10		40
	Socioenvironmental and economic evaluation of REDD+ programs and projects	10	20	10		40
	Strengthening and adaptation of mechanisms for evaluating existing environmental impacts	10	20	5	5	40
	Preparation of social and environmental safeguards	20	30	5	5	60
Participation by key stakeholders	Workshops and meetings	5	10	10	5	30
SESA group	Logistic support	10	10	10	5	35
Communication, consultation, and training	Specific workshops in the eastern and western region	10	10	10	10	40
Total		95	120	80	30	325
Government		35	40	30	5	110
FCPF		30	80	50	25	185
UN-REDD		30				30



Component 3: Develop a National Forest Reference Emission Level and/or a Forest Reference Level

Standard 3 the R-PP text needs to meet for this component: Develop a National Forest Reference Emission Level and/or a Forest Reference Level:

Present a work plan for how the reference level for deforestation, forest degradation (if desired), conservation, sustainable management of forest, and enhancement of carbon stocks will be developed. Include early ideas on a process for determining which approach and methods to use (e.g., forest cover change and GHG emissions based on historical trends, and/or projections into the future of historical trend data; combination of inventory and/or remote sensing, and/or GIS or modeling), major data requirements, and current capacity and capacity requirements. Assess linkages to components 2a (assessment of deforestation drivers), 2b (REDD-plus strategy activities), and 4 (monitoring system design).

(FCPF and UN-REDD recognize that key international policy decisions may affect this component, so a stepwise approach may be useful. This component states what early activities are proposed).

3.1 Reference levels

In Paraguay, the development of reference emission levels (RELs) or reference levels (RLs) in REDD is at an incipient stage, with the activities initiated in the framework of the UN-REDD-NJP, for which reason during implementation of the R-PP, additional actions should be provided for to support the effective development of the RELs/RLs, in accordance with available data. This first approximation is expected to be available shortly.

Accordingly, the aim is to proceed “step-by-step” in line with the decisions of the UNFCCC in Durban in 2011. This approach means that our country will set an initial REL, using available data on historical deforestation and forest inventory; and then it will use methodologies to obtain more complex and less uncertain estimates as the data improve. A route map is established for moving from basic data to obtaining more complete information in order to produce better, more accurate, and less biased estimates.

The reference level will undergo a number of improvements as the countries establish a REDD+ program. In addition, this stepwise system will include the development of reference levels for the country’s two regions (eastern and western), taking their specific features into account, to then attain a national reference level without this conflicting with the approach at the subnational level. As a result, the country would be able to make progress in obtaining more detailed and accurate reference levels, taking account of the dynamics of the two regions where there are better data, or where there is greater potential or interest in implementing a REDD+ program. These reference levels will be integrated into the national reference level.



3.2. Available historical data

Given that the review of available historical data is the essential first step in developing a reference level, existing data will be reviewed to identify the gaps that need to be filled to be able to estimate changes in past and recent land use coverage, and greenhouse gas (GHG) emissions caused by deforestation and/or forest degradation.

3.3 Estimations of greenhouse gases

Inventories of GHGs from the land-use change and forestry (LUCF) sector are included in the First and Second National Communication to the UNFCCC. These reports have used the guidelines of the IPCC (1996) methodology, consisting of four subsectors: changes in forest and other woody biomass stocks; forest and grassland conversion; abandonment of managed lands; and CO₂ emissions and removals from soils. Bearing in mind the first three subsectors, forest plantations and the abandonment of managed lands are the main atmospheric carbon sinks. Component 2a contains detailed information on the use of biomass for energy production.

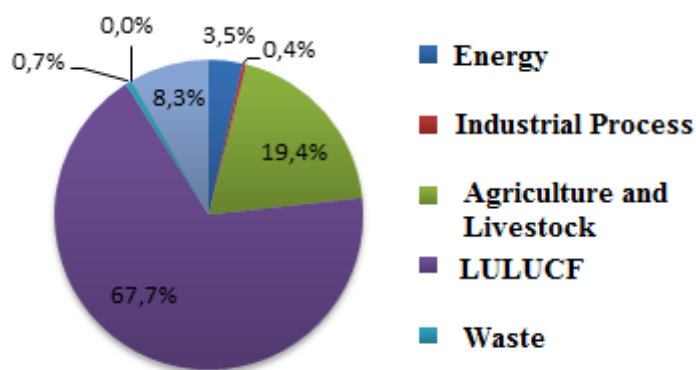
The summary of estimated emissions in the latest inventory is shown in Table 16, as reported in Paraguay's Second National Communication on Climate Change, base year 2000, presented in 2011.

Table 16 CO₂-e Emissions in Gg by Sector in 2000¹

Sector	CO ₂	CH ₄ as CO ₂	N ₂ O as CO ₂	Total CO ₂ -e
Energy	3,252	374	116	3,742
Industrial processes	395	-	-	395
Crop and livestock farming	-	12,998	7,411	20,410
Land use change	66,092	4,894	402	71,388
Waste	-	288	462	750
International bunkers	38	-	-	38
Biomass burning	8,734	-	-	8,734
	78,512	18,555	8,392	105,458

1. CH₄ and N₂O were modified using the 100-year time horizon global warming potentials (GWP100) presented in the IPCC Fourth Assessment Report, 2007.

Chart No. 5 - Sectoral Division of GHG Emissions in 2000 Based on the Numbers Reported in the Second National Communication



The year 2014 is expected to see the start of the Third National Communication on Climate Change and preparation of the first Biennial Update Report (BUR).

The **first BUR will be submitted in December** 2014, containing the inventory of GHGs corresponding to 2010; the document of the Third National Communication on Climate Change will be submitted in 2016, containing the GHG inventories for 2005 and 2012, except for 2010).

The **Third National Communication (TNC)** is expected to develop the GHG inventory and update data collection and filing systems. It will also contain data compiled on activities in the different models, and validation of the use of default emission factors for the main source categories. Bearing these elements in mind, and as the information is scattered across various institutions, efforts will be made to collect, systemize, and process the information to achieve a good level of standardization. This will be done by institutions specialized in the management and generation of statistical data.



An effective database is needed, owing to the volume of information to be processed, and to serve as a permanent updating platform in the next national GHG inventory. The adaptation of activity data (e.g. units required) and the determination of emission factors should be updated to prepare the inventories, since each module has a different degree of approximation in the GHG estimations.

The national GHG inventory corresponding to the 2005 and 2012 series will be produced as part of the preparation of the TCN. The inventory for 2010 will be presented in the BUR; and the 1994 inventory will be recalculated to define an appropriate baseline with the necessary quality. In addition, the IPCC 2006 guidelines (Tier 1 and 2) will be used, depending on the analyses of key categories, and the mandatory standard quality assurance/quality control (QA/QC) procedures for all sectors.

3.4 Constraints and uncertainties

The data on annual deforestation obtained from the interpretation of satellite images between 1990 and 2011 as part of UNREDD-NJP are reliable. The greatest uncertainty concerns pre-1990 annual historical deforestation in certain zones. Historical data are available as from 1945 particularly for the eastern region.

The temporal resolution of deforestation and emissions in time series are also affected by the data sources. Fluctuations in the data could mostly be the result of the different data used to estimate historical deforestation. Nonetheless, the use of remote sensing has made it possible to improve the temporal resolution, particularly in recent years.

3.5 Monitoring of native forest cover

To evaluate changes in the area of native forest and to ensure consistency between historical data and future monitoring activities, the methodology to be agreed upon at the national level will be used to estimate activity data. The UN-REDD program, working through FAO, developed an initial phase, in beta version, for the implementation of Paraguay's national forestry monitoring system, which will be improved during execution of the activities, thus helping to meet the requirements of a REDD+ program. The subsequent phases need to be implemented in 2014. Further details are provided in Component 4.

The methodologies used to monitor degradation and any increase or variation in carbon reserves in forest lands that remain forest lands (i.e. the degradation component of REDD) are more complicated, so collaboration with local and worldwide scientific institutions is necessary.

Account will be taken of regional experiences on community forest monitoring.



3.6 GHG inventories

In terms of technical knowledge for GHG inventories, Paraguay's key challenges in putting a robust system in place concern the following:

- a. Small interagency teams with multiple responsibilities and limited resources
- b. Nonexistence of a training program on the preparation of GHG inventories
- c. Difficulties in incorporating the capacity and knowledge developed during the preparation of inventories
- d. The LUCF sector was the hardest to estimate in preparing the national GHG inventory, because the IPCC requirements are more specific than the information available in the country. Huge efforts were made to obtain the best quality data possible and fulfill the proposed objective. This demonstrates the need to strengthen interagency coordination, to guarantee the consistency and continuity of inventory activities and the maintenance and improvement of technical knowledge.

Some general training activities on inventories were carried out as part of the TNC. Moreover, the preparation strategy will include the creation of a national technical program for technical capacity strengthening, which is comprehensive and involves collaboration from national and international institutions, in coordination with the activities that have begun under UNREDD-NJP and other initiatives.

Under the auspices of the National Climate Change Program, and working through the National Climate Change Commission, strategic alliances will be forged for the effective preparation of GHG inventories, with national institutions being responsible for compiling the sector-level information to be reported by SEAM in its role as UNFCCC authority. In this regard the sector-level actors would be:

- The Ministry of Agriculture and Livestock, agriculture sector
- The National Forestry Institute, land use change and forestry sector
- The Ministry of Industry and Trade, industrial and production sector
- Municipalities/Local Governments: waste sector
- Ministry of Public Works and Communications, energy sector

Academia, represented by the *Universidad Nacional de Asunción* and the Catholic University, will have a fundamental role to play in the QA/QC of the data.

3.7 Reference level and national circumstances

3.7.1 Preliminary assessment of the impact of forestry legislation and future emission scenarios caused by deforestation

The preparation of a forest or emissions reference level should take account of national circumstances that affect the assessment of the validity of trends in deforestation and land use generally. The pronounced increase in deforestation that has occurred in the last few years is an example of such circumstances, so account will be taken of actions already initiated in the UNREDD-NJP framework.



3.7.2 Future deforestation scenarios

As part of UNREDD-NJP, future deforestation scenarios are being developed that aim to analyze the future change in land cover in Paraguay under different rural development assumptions, with and without the presence of a REDD+ program. The progress made by this study was presented nationally in April 2014, and it is expected to be completed by June 2014.

The actions being undertaken include the development of an inertial scenario (“business as usual”), in terms of land use change and deforestation with a 20-year projection, as well as the modeling of possible development and land use change scenarios in Paraguay. This modeling work includes data on the opportunity costs of REDD+, data on the multiple benefits of the forest, and other data that could be relevant to the analysis. This work will produce at least three future scenarios for land use change and deforestation, with and without the presence of a REDD+ program, for three different development assumptions (low, medium, and high-intensity) in the rural sector of Paraguay over a 20-year horizon.

3.7.3 Proposal of a standard work program to establish a reference level for REDD+

A step-by-step program will be implemented to define a REDD+ reference level at the end of the preparation phase, based on the following items:

- Review of the results of available data and harmonization of the various methods and methodologies for measuring and compiling the data.
- In particular, in relation to synergies in the TNC preparation and process: (i) the TNC will make an initial review and update of the inventories for the sector; and (ii) the activities of this component will take account of the forestry inventory in the work program to define a REDD+ reference level, specifying consistent information sources and providing a process of review and feedback.
- Past deforestation: the time series to be evaluated will be decided on according to the availability of existing data, to establish a reference level.
- Evaluation of the impact of forestry legislation. This will be done in several stages, to determine the contribution made by the new law and investment in resources to reduce the deforestation rate. The number of annual periods needed to establish a baseline of possible accreditation will be determined. The difference between business as usual (BAU) and the accreditation baseline will be the lower rates of deforestation and the reductions in emissions made by the country’s contribution in forestry legislation within the current world economic scenario.
- Establish a possible accreditation baseline. The difference between BAU and the accreditation baseline will be the lower rates of deforestation and the reductions in emissions made by the country’s contribution in forestry legislation within the current world economic scenario.
- Model the basic economic factors underlying the expansion of soya and meat production in departments where deforestation is on a rising trend. This will be an important activity for aligning the reference scenario with the drivers of global or national macroeconomic



factors that directly affect agricultural exports. Some of the modeling studies for these interactions are either being done or have already been done.

- Standardization and improvement of available data sources. The improvement of this data collection will form part of component 4A. More accurate data are needed on the biomass contents of the different forest ecosystems; in particular, allometric equations for a wide range of species, and a number of other issues that were identified in the section on uncertainties and constraints.

3.7.4 Application of the stepwise approach

According to the stepwise approach proposed by UNFCCC (2011), the steps are as follows:

Step 1 is the starting point for determining the RLs in each country, which include what is analyzed in the document.

Step 2 is an initial attempt to include national circumstances in a quantitative way, i.e. performing evaluations based on tests or drivers to adapt historical rates, and by using the best-quality country data in the most representative departments.

Step 3 deepens the approach of Step 2 using better quality data that make it possible to apply more diverse modeling methods: e.g. activity data of greater spatial resolution and specific information on drivers that makes it possible to use spatially explicit and more complex simulation or regression models, to obtain more reliable estimations in the future. Furthermore, under this approach, it might not be necessary to use historical deforestation as the main indicator, because it is possible to analyze, model, and forecast activities and specific drivers individually (albeit weighted according to historical trends). The staged model will also include development of an RL in a region as a provisional measure, as has been determined initially, to then move to a departmental or ecoregion level.

3.7.5 Summary of the main activities for developing a staged reference level using the stepwise approach

- Develop a less detailed reference level based on the historical trend
- Develop reference levels for the two regions of Paraguay and for departments that are priorities for the country and have greater REDD+ potential
- Define, in the medium term, a reference level that includes adjustments based on new data and the analysis of deforestation and degradation trends
- Develop a reference level based on spatially explicit geographic data and trends, for relevant areas of the country

3.8 Key conceptual issues and strategies

Under Decision 1/CP.16 of the sixteenth session of the UNFCCC Conference of the Parties (COP), developing countries are requested to prepare RLs, or, as the case may be, subnational forest reference levels as a provisional measure, according to national circumstances and pursuant to Decision 4/CP.15 of the fifteenth COP in 2010. The conceptual and strategic issues which the country is considering include the following:



- Adopt the definition of forests for REDD that is most convenient for the country
- Analyze key categories to determine the most significant emission sources, and on the basis of this analysis, prioritize their treatment
- Decide upon the scale (national or subnational)
- Define the applicable historical period for calculating emissions
Analyze the country's methodological options for defining its retrospective reference level

The process of defining reference scenarios in the particular case of Paraguay should evaluate an alternative historical projection or simulated RL. The latter should include variables that affect the deforestation rate, such as the price of soybeans, meat, firewood as an energy source, and simulate their behavior in a given time period. This analysis could be done for the western and eastern region, given the difference in LULUC in the two areas. Although complex, this analysis will also make it possible to plan the proposed mitigation alternatives and, in turn, decide whether to have an RL for each region and integrate a national RL.

The forest inventory includes the monitoring of the five carbon sinks; and deforestation will be included for the RL in an initial stage, before evaluating how and where to incorporate degradation and increases in carbon stocks.



Component 3: Development of a national reference level of forest emissions or a national forest reference level						
Main activity	Sub-Activity	Estimated costs in thousands of US\$				
		2015	2016	2017	2018	Total
Reference level (eastern, western, and national)	Independent evaluation of products and scheme of reference levels for Paraguay	40	30			70
	Development of scenarios	50	30			80
	Strengthening of national capacities for implementing the national inventory system	30	30			60
	Corrections identified and implemented and field testing		30	30	20	80
	Establish a framework for recording and monitoring REDD+ initiatives		20	20		40
	Dissemination and capacity building	10	10	5		25
Total		130	150	55	20	355
Government		30	30	25	10	95
FCPF		50	120	30	10	210
UN-REDD		50				50



Component 4: Design Systems for National Forest Monitoring and Information on Safeguards

4a. National Forest Monitoring System

Standard 4a the R-PP text needs to meet for this component: National Forest Monitoring System

The R-PP provides a proposal and work plan for the initial design, on a stepwise basis, of an integrated monitoring system of measurement, reporting and verification of changes in deforestation and/or forest degradation, and forest enhancement activities. The system design should include early ideas on enhancing country capability (either within an integrated system, or in coordinated activities) to monitor emissions reductions and enhancement of forest carbon stocks, and to assess the impacts of the REDD-plus strategy in the forest sector.

The R-PP should describe major data requirements, capacity requirements, how transparency of the monitoring system and data will be addressed, early ideas on which methods to use, and how the system would engage participatory approaches to monitoring by forest-dependent indigenous peoples and other forest dwellers. The R-PP should also address the potential for independent monitoring and review, involving civil society and other stakeholders, and how findings would be fed back to improve REDD-plus implementation. The proposal should present early ideas on how the system could evolve into a mature REDD-plus monitoring system with the full set of capabilities.

4.a.1 Presentation

Under REDD+, the establishment of a National Forestry Monitoring System (SNMF) represents the need for participating countries to monitor all actions and measures involved in the implementation of the National REDD+ policy, constituting a platform for direct access to its results. These actions should be based, directly, or indirectly, on national REDD+ strategies and could also include actions that are not related to the evaluation of carbon, such as the strengthening of national forestry laws.

The Paraguayan government recognizes the importance of Decisions 4/CP.15 and 1/CP.16 and the package of REDD decisions adopted at the recent UNFCCC Summit in Warsaw; and it is working to adapt them to national forest monitoring circumstances. Specifically, paragraph 71 of Decision 1/CP.16 requests developing countries that intend to undertake REDD+ activities to develop a robust and transparent national forest monitoring system to track and report on the five REDD+ activities.



Paraguay's SNMF has been designed as a system that responds in this way to domestic and international needs and monitoring, as well as to international notification requirements on measurement, review, and verification (MRV). In 2012 as part of the implementation of the UNREDD-NJP, Paraguay started to review solutions and alternatives for constructing an operational forest monitoring system capable of meeting the standards required for REDD+ monitoring and notification.

In the absence of that process, Paraguay would not be able to develop a reliable and transparent SNMF that was country-driven and adapted to its requirements. The country would be unable to monitor the application of REDD-plus policies and measures, or the results-based demonstration activities and actions. A failing in the process would render Paraguay unable to demonstrate internationally that it can apply the REDD+ activities; and, as a result, it would not be eligible to receive REDD+ funds through the UNFCCC.

This initiative has supported the start of the REDD+ process in Paraguay under the UNFCCC, by strengthening technological capacities and technology transfer and by developing a global REDD+ SNMF. This system is being constructed on the basis of satellite data that are available in Paraguay and currently existing mapping techniques; and it fully recognizes the value of the work already done by various participants on this topic. It includes tools developed by a team based at the Food and Agriculture Organization of the United Nations (FAO) in Rome and by the Brazilian National Institute of Space Research (INPE, Sao José dos Campos, Brazil).

The system was constructed on the basis of specific collaboration and actions to strengthen Paraguay's technical capacities for monitoring forest cover, under the direction of the National REDD technical team; the Environment Secretariat (SEAM), the National Forestry Institute (INFONA) and the FAPI. The concept of Paraguay's SNMF was presented for the first time at a meeting of the UNREDD Steering Committee in Asunción in March 2012. The aim of this first phase for the SNMF in Paraguay has been to develop and implement a beta version of its SNMF, thereby supporting its National Joint Program (NJP), specifically output 1.2 (SEAM/INFONA) to measure and evaluate the reduction of emissions from deforestation and forest degradation.

This version was presented at the meeting of the UNREDD program in Asunción. The portal containing its beta version is online at (<http://paraguay-smf.org>), where the user can find national information relating to maps of forest cover, types of forests, maps of protected areas, and maps of managed forest areas.



4.a.2 National actions in the SNMF

Paraguay's SNMF is intended as a national tool to monitor REDD-plus measures and policies in the country. The objective is firstly to integrate the SNMF into the national forest inventory, and with indicators of forest area, types of forest ecosystems, the expansion or care of protected areas, the creation and application of certification schemes, the monitoring and application of the legal framework, and participation by indigenous peoples/stakeholders, etc. Although the monitoring of REDD+ measures and policies in Paraguay may potentially be associated with results achieved on GHG emissions and absorption, this does not represent the main objective of the SNMF. Nor is it an ultimate objective of the SNMF to monitor the results of forest area, changes in forest area, carbon stocks, and changes in carbon stocks. Nonetheless, the objective is to communicate such information through the SNMF so that it can be easily related to numerous variables that will be presented in the SNMF.

Although it is still under development, Paraguay's SNMF must make it possible: (i) to be used by the government to report the results obtained in applications of REDD+ demonstration activities, results-based actions and national policies and measures in the forest sector; (ii) to have a multiobjective methodological scope, so that the government can use it to fulfill the monitoring needs of other national and international processes; (iii) to be constructed on the systems and elements of the monitoring system that already exists in Paraguay; (iv) to be developed to become a permanent operational system forming an integral part of the mandates of SEAM, INFONA, and FAPI, and their technical divisions, to ensure its long-term sustainability and functioning.

Monitoring needs can change through time; and, particularly in the REDD+ environment, these aim to achieve the scope in three phases described in paragraph 73 of decision 1/CP.16. In short, monitoring refers to the development of a system which:

- Phase 1 of REDD+ (preparation), entails the development and implementation of the monitoring system. This includes all investments in terms of the selection and definition of systems, capacity strengthening, the testing of such systems, and the definition of national REDD+ policies and measures, including a plan of action for the SNMF; a forest cover map has been developed using geographic information systems (GIS), which will be put on the platform and then monitored periodically.
- Phase 2 of REDD+ (monitoring), involves the application of national REDD-plus policies and measures that will result in demonstration activities that should be results-based, i.e. based on measurable positive outcomes. A system for monitoring the demonstration activities is needed in phase 2. The system will track the results obtained by all demonstration activities and also contribute information on LULUC, in the areas where demonstration activities are applied.
- In phase 3 of REDD+, the monitoring system will be extended nationally to specifically verify that the application of national policies and measures on the national territorial scale is results-based (i.e. determine the intensity of each REDD+ activity on national territory and how this is changing). This is achieved through a system for monitoring the



implementation of REDD+ policies and measures, which will enable the country to track the success of the policies and measures, and subsequently adjust them if necessary. This monitoring system will also be a key element for supporting and operating whatever national subsidy or payment distribution scheme is put in place.

4.a.3 SNMF implementation

Under the initiative of additional support from the Global UN-REDD program to Paraguay's NJP, the first phase involving the rapid launch of development and implementation of a beta version of the SNMF in Paraguay was carried out in February and March 2012, at FAO headquarters in Rome and in Asunción where a training workshop was held on Representation of the Earth via Satellite Images (27 February to 8 March). With direction and support from SEAM and INFONA, FAO was responsible for the development and implementation of the system nationally, making sure that the adaptations needed to reflect national circumstances were made.

In the context of the Global UN-REDD program, the implementation of the SNMF and building of national capacities form part of the results in which FAO is the lead agency. Nonetheless, the process of developing the SNMF involves coordination and cooperation with all United Nations agencies and relevant local stakeholders.

The SNMF is linked to other work areas of the UN-REDD program, such as equitable and transparent management of the multiple benefits, activities led by the United Nations Environment Programme (UNEP) and United Nations Development Programme (UNDP).

4.a.4 Building on specific, proven and operational experiences

This proposal is based on the experiences of FAO in collaboration with INPE in similar exercises currently under way in the Democratic Republic of the Congo, Papua New Guinea, and Vietnam. The TerraAmazon platform developed by INPE for national satellite monitoring was used and adapted to national needs and circumstances. The INPE system is free and supported by analysis and programming teams in Brazil. To supplement this, the Open Foris Toolkit (a set of open-access tools developed by FAO) was used for the advanced processing of satellite images.

During the training workshop held in Asunción, 17 technical experts in GIS /remote sensors from SEAM, INFONA and the National University of Asunción (UNA) worked in conjunction with three FAO facilitators. The training workshop included an introduction to remote sensing applied to forest monitoring, the management and edition of satellite images in TerraAmazon, and the advanced processing of satellite images with open-access tools (OpenForis Toolkit).



Based on information existing and available in Paraguay, methodologies and techniques for the cartography of forest coverage and forest coverage changes were developed and applied operationally and didactically to produce preliminary maps. The methodology is documented and available to all through the Open Foris website (http://km.fao.org/OFwiki/index.php/Open_Foris_Toolkit).

At the same time, the GIS-web portal of forest information was developed at FAO headquarters in Rome under the instructions and guidance of the National UN-REDD team, based on national needs and requirements and existing data (<http://paraguay-smf.org>).

Although the web portal for the dissemination of information is still under construction, it already contains the preliminary maps on forest cover and forest cover changes produced during the workshop. The development of a Web interface enables any user to view the maps produced, calculate deforestation statistics, and make comments on that data.

The portal also allows for the communication of any other type of information on forest resources in Paraguay.

Following the example of Brazil, Paraguay's SNMF allows for results to be verified through a cost-free, online, and transparent system. Thanks to its transparency, the data produced can be proven and accepted by the international community worldwide.

The system enables any user to verify, online, the area of deforestation in the neighborhood of an infrastructure; and to report whether the image and interpretation are correct. This will allow not only for fully transparent monitoring and verification nationally and internationally, but also for broader participation by local communities in the process of implementing national REDD+ policies and measures in Paraguay.

The system has been developed on the basis of structures, programs, and initiatives already existing in the country, region, and internationally.

4.a.5 Next steps in SNMF implementation

The implementation of Paraguay's SNMF fulfils one of the decisions adopted in the Cancún Agreements, which allows for validation in which subnational activities are results-based, and thus provides one of the technical elements needed for Paraguay to be able to enter phase 2 of REDD+, since the other required elements (e.g. technical, social, and procedural) have also been developed.

System development and capacity strengthening in Paraguay's National UN-REDD team were carried out in 2012. With support from the UN-REDD FAO team, the methodology and maps of forest cover change will continue to be improved.



Technical training on the GIS-web portal was provided (system maintenance and data management), and will be extended further to be able to fully transfer the system in Paraguay's UN-REDD technical unit. The phased approach enables the country to absorb and manage the future system autonomously.

The system is expected to become an operational tool of information and forest management in a broader sense, which can inform and monitor policies and measures related to the forest sector.

Thus far, the following results have been obtained from the implementation of the National Forest Information System (SNIF):

- Field spreadsheets for entering information into the OPEN FORIS COLLECT database for the National Forest Inventory (NFI) have been designed and validated;
- The information system through OPEN FORIS COLLECT is operating, in relation to the forest sector; nonetheless, spreadsheets on fauna and socioeconomic data are currently being validated;
- Field data have been entered in the database, which can now be used for any information required by the NFI;
- There is a diagnostic inventory of equipment available in INFONA, as well as the equipment required for implementing the SNIF;
- Computer hardware and software acquired for the processing of satellite images and the adaptation of offices for the functioning of the NFI.

4.a.6. National Forest Inventory (NFI)

Development of the NFI involves a number of prior activities such as: the design of the methodology and definition of the categories and subcategories of land use consistent with that recommended by the IPCC in its manual of good practices on land use change, to be used to stratify areas to be considered in the inventory execution phase.

The NFI, as designed and proposed, is the outcome of a number of technical meetings that have been held and which have obtained specific results, such as the definition of forest categories and subcategories for the purpose of stratifying the forest cover map and determining the structure of measurement lots and the parameters to be considered in the NFI. The pilot phase of the NFI is currently in the implementation stage.

In relation to the NFI methodology, the following results have been obtained thus far:

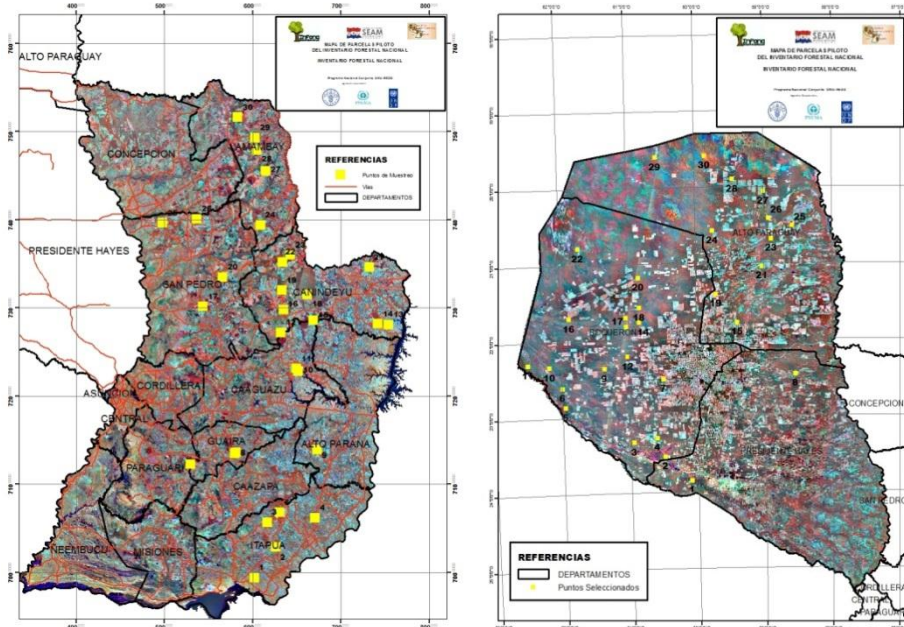
- Validation of measurement instruments for the NFI;
- Design of the sampling unit;
- The variables to be considered were identified and have been included in the manual and field spreadsheet; characterization of the natural environment; forest biodiversity; status and disturbance of the forests; productive status of the forests; situation of trees outside forest formations; biomass; dead organic material; soils; rapid fauna and flora ecological



assessment, and socioeconomic evaluation, the two latter to be included in the field manual;

- Use of the manual and field spreadsheet, in version 1, to obtain data from the five sampling units, three of which are located in the western region, one supported by SEAM technicians; and two in the eastern region, one of which supported by SEAM technicians.
- Pilot phase sampling points:
 - Fram – Itapúa department - Eastern region;
 - Alto Verá – Itapúa department - Eastern region;
 - Tte. Ochoa –Boquerón department - Western region;
 - Tte. Esteban Martínez – Pte. Hayes department - Western region;
 - Mayor Infante Rivarola – Boquerón department - Western region.

Maps 7 and 8: NFI sampling points



Map legend:
L-H map

MAP OF PILOT LOTS
OF THE NATIONAL FOREST INVENTORY

NATIONAL FOREST INVENTORY

[Bottom line illegible]

REFERENCES
Sampling point
Roads



DEPARTMENTS

R-H map

MAP OF PILOT LOTS
OF THE NATIONAL FOREST INVENTORY

NATIONAL FOREST INVENTORY

[Bottom line illegible]

REFERENCES

DEPARTMENTS

Selected points

- There is a field manual containing good recording practices for collecting data on this type of ecosystems, to be presented and validated by the National Technical Team (ETN).
- Operational costs for the sampling units have been estimated and currently in the process of validation by the ETN. In addition, the planning of fieldwork for the squads, and structure and operability, are currently being revised and adjusted by the ETN.

In relation to the map of forest cover, the following cartographic products are available:

- Map of accessibility (road) to forests for the pilot phase sampling area;
- Map of the distribution of 60 sampling units (conglomerate), NFI pilot phase;
- Map of the location of the points of the sample units for both regions, to be surveyed;
- Map of forest and nonforest areas;
- Map of simple deforestation, preliminary 1990-2011, eastern and western region;
- Map of forest dynamics, 1990-2011;
- Map of forest classified by tree cover
- Field verification, in May 2013, of the forest/nonforest map, which was performed by the staff of the INFONA regional offices.

There are 91 verification points, identified by technical staff at the INFONA regional offices, to identify points of conflict, so-called because it was necessary to ascertain whether they were forest formations or areas subject to another use.

As the institution responsible for implementing the NFI, INFONA has made known that it will need additional resources to develop lots in the western region of the country, where 84% of remaining forests nationwide are located, because only 200 lots can be covered with the resources anticipated in the UNREDD-NJP.



4. a.7 Greenhouse gas inventory

Carbon emissions from forests are calculated from measurements of the rates of deforestation and/or biomass degradation and other data from different types of forests. National accounting in respect of forest GHGs will be done using existing data, with INFONA responsible for compiling the data for this sector. In regions where REDD+ activities and/or pilot programs are being implemented, specific adjustments will be made to enhance accuracy, both in the reference level and in the capacity of the monitoring system. The current assumption is that deforestation leads to an immediate release of all carbon into the atmosphere, but estimations will be made in the areas of interest to keep track of carbon from the activities.

The data compiled for the national GHG inventory will be sent to SEAM, as the UNFCCC implementation authority, to be reported in the consolidated national inventory. In the framework of the national climate change policy, universities will be involved to ensure quality control (QA/QC) of the data contained in the GHG inventory.

4.a.8 Integration of the REDD+ land monitoring system

With the aim of implementing an SNMF that fulfils the REDD commitments, INFONA and SEAM will need to be strengthened and adapted, building capacities to enable the system to operate as a national tool for monitoring the results of policies and actions implemented under REDD+ in Paraguay, and to obtain information on land use in the broadest sense of the term.

4.a.9 Reporting and verification mechanisms

With support from national technical experts, under the guidance of the REDD+ technical group, and in coordination with the activities undertaken by the UNREDD-NJP and other initiatives, it is intended to develop a reporting and verification methodology compatible with the developments and demands of the UNFCCC. This working group will bring together experts from universities, research centers and nongovernmental organizations, to lay down guidelines and procedures for defining the standards and modalities for presenting information and independent verification.

For this component, account will be taken of the progress made in work coordinated by the Forestry Engineering Faculty of the National University of Asunción, with support from the Forest Research Institute of Japan (FFPRI), in developing an MRV methodology proposal based on satellite imaging, and the preparation of allometric equations by ecoregion and by species for the eastern and western regions of the country. The methodologies used in developing this research are compatible with the parameters established in Open Foris; the tools are different, and the minimum area taken into consideration is different, but the same database has been used. The general aim of the technical working group will be to undertake activities to develop a route map for establishing an MRV system for REDD+.

A preliminary analysis has identified a number of points for future development:



- Evaluation of gaps in the capacity of MRV to satisfy national needs (forest change processes, dominant factors or drivers), and international requirements (IPCC requirements and LULUCF good practices). Development of an MRV work plan to build sustainable capacities in the country on the basis of current understanding and knowledge, stressing opportunities for REDD+ implementation. Specification of a series of key activities that should be undertaken in the short term. The results have given rise to the definition of a plan for developing MRV capacity, which satisfies a number of requirements and general principles:
- The general objective is a process for developing capacity to establish a sustainable MRV mechanism for the application of REDD+ policies, and compensation based on the results of those activities in the long term, as a contribution to the development of a climate change strategy and the effective implementation of related national legislation.
- The development of a national MRV system for REDD+ uses a phased approach along a route map specifying short-term priorities and long-term objectives, based on existing capacities and data, and on international requirements and national needs. Its objective is to support the annual estimation, notification, and verification of forest-related carbon emissions and absorption nationally.
- The evolution of the MRV system directly related to the development of REDD+ policies and their application, and including systematic monitoring of national reports and the verification system.
- A strong institutional base and the establishment and maintenance of partnership and cooperation at all levels, as a favorable framework.

Specific areas were identified in which activities are recommended for the first phase:

- ✓ Develop and implement a national mechanism and institutional framework
- ✓ Make a comprehensive evaluation of forest area by historical periods to be agreed upon nationally, based on data availability
- ✓ Build measurement and monitoring capacities
- ✓ Development of MRV for a set of regional REDD-plus demonstration activities
- ✓ Links with the international community
- ✓ Maintain an internal and national communication mechanism

4.a.10 Main activities

1. Forest monitoring. Improve real-time performance to obtain annual maps of forest areas throughout the country. Uncertainty evaluations and sensitivity analyses will be undertaken. Data will be collected from field measurements as auxiliary information to evaluate accuracy.

2 National Forest Inventory. Setting in motion of the design and implementation of the permanent forest inventories system. Preliminary studies to develop a rapid plan for applying the forest inventory data and the need to evaluate forest biomass changes in specific areas. This plan will be a medium- and long-term target to obtain an update on certain specific areas and complete information in other areas.



3. Inventory of GHG from forests, biennial update report (BUR) and carbon accounting system. In coordination with other initiatives, a national system will be established to periodically prepare national GHG inventories, which will include a system for accounting and recording of emission reductions. The institutional arrangements and training activities will be undertaken as priority activities in coordination with the start of the preparation of the TNC and during UNREDD-NJP implementation.

4. Report and verification. A group of national professionals, consisting of experts from universities, research centers, nongovernmental organizations, certification agencies, will be set up to develop guidelines and procedures for laying the foundations and designing mechanisms for presenting national reports of public information and independent verification, which will fulfill the requirements to be established by the UNFCCC.

Budget 4a. National Forestry Monitoring System						
Main Activity	Sub-Activity	Estimated Cost (US\$ thousand)				
		2015	2016	2017	2018	Total
SNMF and MRV	Strengthening of the National Forest Inventory for REDD+	400	140			540
	SNMF implementation	100	20	10	10	140
	Capacity building and strengthening of regional units for REDD+	100	20	20		140
	Capacity building in local communities for field monitoring and verification	60	20	10		90
Total		660	200	40	10	910
Government		60	40	10		110
FCPF		80	160	30	10	280
UN-REDD		80				80
Bilateral cooperation from Japan		440				440



4b. Designing an Information System for Multiple Benefits, Other Impacts, Governance, and Safeguards

4. b.1 Background

The safeguards are policies and measures that address the direct and indirect impacts on communities and ecosystems, identifying, analyzing, and managing the risks and opportunities (Murphy 2011 cited by Angelsen et al, 2013). As defined in the seventeenth UNFCCC COP, “Safeguards encompass governance transparencies; respect for the rights of indigenous peoples and local populations, and the full participation in REDD-plus activity; and action to reduce the risk of loss of biodiversity, reversal (permanency) and displacement of emissions (leaks).”

The UNFCCC REDD+ safeguards are centered on national forest governance structures, mainly in relation to transparency and effectiveness. The indicators for evaluating transparent governance structures are mainly targeted to ensure that the country guarantees the right to access to information and accountability. In contrast, effective governance structures are evaluated through the existence of a sound legal and institutional framework that guarantees right of access, intersectoral coordination, and the integration of economic and social elements in environmental decision-making.

1. Compatibility with: national forest programs, international conventions and agreements
2. Transparency/effectiveness of national forest governance strategies
3. Respect for the knowledge and rights of indigenous peoples and local communities
4. Full and effective participation by stakeholders
5. Compatibility with: conservation of natural forests, biological diversity, promotion of other social and environmental benefits
6. Adoption of measures to address reversal risks
7. Adoption of measures to reduce the displacement of emissions

The UNFCCC REDD+ safeguards aim not only to mitigate the risk of negative social and environmental impacts from REDD+ measures, but also to actively promote benefits that go beyond the reduction of carbon emissions, such as the environmental services provided by forest ecosystems and greater security of land holding, the empowerment of stakeholders by ensuring their full and effective participation, and the improvement of biodiversity and forest governance.

The UNFCCC REDD+ safeguards provide an outline for a global framework of social, environmental, and governance principles, under which the REDD+ activities and measures must be implemented. By fulfilling that global framework, countries can minimize the risks posed by REDD+ measures and increase the possibility of obtaining REDD+ benefits, whether carbon-related or otherwise.



The safeguards represent the set of measures and procedures designed to help the REDD+ mechanism achieve sustainable emissions reduction, through forest governance strengthening, forest conservation, respect for human rights, and minimization of the impact on society and the environment. For this purpose, the understanding and capacities of stakeholders will be strengthened in terms of their rights and obligations to participate in environmental decision-making (REDD+). How to increase access to information on the right to participation in decision-making, considering the analyses contained in the study of the existing legal framework to permit access to all sectors of the country.

In terms of multiple benefits, other impacts, governance, and safeguards in REDD+, the proposal intends to create a system complementary to the national forest monitoring system, to address the co-benefits in terms of biodiversity and socioeconomic considerations and information on safeguard compliance.

4.b.2 Social and environmental impacts

Appendix I of Decision 1 of the sixteenth COP, held in Cancún, Mexico, specifies the guidelines and safeguards applicable to REDD+. This decision lists the measures through which the safeguards should be promoted and supported; and it encourages developing-country parties to contribute to the work of mitigation in the forest sector, by adopting measures, at their discretion and according to their respective capacities and national circumstances. All of those measures should be applied “promoted, and supported” in the following safeguards:

- a. That actions are complemented all are consistent with the objectives of national forest programs and relevant international conventions and agreements;
- b. Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;
- c. Respect for the knowledge and rights of indigenous peoples and members of local communities;
- d. Full and effective participation in REDD+ by relevant stakeholders, in particular indigenous peoples and local communities;
- e. That actions are consistent with the conservation of natural forests and biological diversity;
- f. Actions to address the risks of reversals;
- g. Actions to reduce displacement of emissions.

The systems that provide information on how the REDD+ safeguards are respected and addressed should take account of national circumstances and capacities, recognize national sovereignty and existing legislation, as well as the relevant international commitments and agreements, and respect gender issues. In addition they should:

- a. Be consistent with the agreements reached in COP 16



- b. Provide consistent and transparent information that is accessible to relevant stakeholders and is updated regularly
- c. Be transparent and flexible to allow for improvements through time
- d. Provide information on how the safeguards (those defined in the Cancún Agreement) are being addressed and respected
- e. Be country-driven and implemented at the national level
- f. Build on already existing systems as far as possible

Other desirable characteristics that the information system should fulfill for multiple benefits, other impacts, governance, and safeguards, are as follows:

- The system should be capable of providing accurate, timely, reliable, and complete information on various elements and sub-elements that can be identified in each of the safeguards defined in section 2 of Annex I of Decision 1/CP.16
- The quality of the information (relevance, consistency, objectivity, comparability through time) and implementation of the system should be consistent with official and legal standards and procedures
- It should correspond progressively to the different phases of REDD+, until it reaches the stage of full application (results-based)
- It should satisfy the information needs of domestic interest groups and legitimate third parties, such as donors that contribute funds
- The information on how the safeguards are addressed and respected should be presented as an integral part of status reports on the implementation of the REDD+ strategy, so as to be consistent with the status and phase of its execution
- In the process of designing and implementing the system, and in the supply of information, the competent authorities or institutions, such as the Paraguay Indigenous Peoples' Institute (INDI), the National Land and Rural Development Institute (INDERT), and ministries, will participate pursuant to their legal mandates in the areas of application of REDD+ related policies.
- The final design of the information system should be legitimized with stakeholders.

All of these characteristics will be taken into consideration when evaluating the social and environmental impacts of REDD+ actions. **A baseline will be established** at the start of strategy preparation. Drawing on previous experiences, procedures and protocols will be derived for use in the information system for multiple benefits, other impacts, governance and safeguards for REDD+ in Paraguay.

Then, on a broadly participatory basis, **criteria and indicators will be defined** for monitoring fulfillment of the social and environmental safeguards. The most relevant and cost-efficient ones will be prioritized. This will ensure that the REDD+ implementation process generates a balance of social, economic, and environmental benefits in forest environments and rural populations that occupy the territory in question. The process of defining the criteria and indicators to be applied in early REDD+ actions will focus on the monitoring and verification of benefits, in the areas of biodiversity, water resources,



socioeconomic and governance issues, in which community monitoring will be promoted to encourage the involvement of the communities.

The following criteria will be considered in selecting the indicators:

- Relevant: within the scope of official information.
- Pertinent: adapted to the objectives, international commitments, and other national demands. Defines priority.
- Responsibility for generating the indicator: there is an entity that generates the indicator regularly.
- Availability of base information: the entities identified as a source of variables for the indicators generate the base information regularly.
- Periodicity requirements for the base information: based on the period determined for the generation of the indicators arising from demand requirements.
- Viable indicator: the indicator that fulfils all of the previous requirements

Some of these indicators could be the following:

- Review, analysis, and proposals for potential reforms of the legal framework.
- Review of existing indicators and systems
- Definition of indicators needed to monitor the safeguards
- Identify existing strengths and weaknesses
- Identify gaps in the indicators
- Develop methodological files.

The design and implementation of the information system for multiple benefits, other impacts, governance, and safeguards will be progressive, and consistent with the supply of financial resources, as specified in Decision 1/COP.16. As far as possible, the same consultation mechanisms will be used as for the process of constructing the national REDD+ strategy. The process to be followed is:

- Interpretation and analysis of context
- Compilation and analysis of information: conceptual, legal, administrative, methodological, and project framework
- Selection of indicators and identification of gaps
- Design of new indicators
- Architecture proposal for the information system on multiple benefits, other impacts, governance, and safeguards in the REDD+ context
- Legitimization with relevant stakeholders and sectors
- Definition of steps to be implemented



4.b.3 National progress towards implementing a national safeguards system

Every country that develops a REDD+ program will need a safeguards system that ensures that the opportunities and social and environmental risks of REDD+ are addressed effectively. The safeguards system consists of:

- The national policies, laws and standards that establish safeguards for REDD+; international conventions, agreements, and declarations;
- A grievance redress mechanism that enables stakeholders affected by REDD+ to receive feedback and appropriate responses relating to the application of safeguards.

Since the preparation for the implementation of UNREDD-NJP a number of national actions have been undertaken with a view to constructing a route map for implementing a national safeguards system. These actions consist of:

- Inclusion of the guidelines issued by the Federation for the Self-Determination of Indigenous Peoples (FAPI) for the implementation of the National Joint Program in indigenous territories.
- An agreement to analyze land holding, including indigenous territories and the preparation of a proposal for a plan for demarcation and boundary setting.
- The inclusion of a plan for designing a mechanism to formalize land rights.
- An agreement to analyze the social, economic, and environmental aspects related to the design and implementation of REDD+ projects
- Inclusion of a plan to analyze national policies and laws and international regulations, including those that affect indigenous peoples and that deal with rights to land.
- Proposal of a consultation and consent mechanism.

As a party involved in the implementation of UNREDD-NJP, the FAPI has been developing proposals to implement certain elements of the REDD+ strategy, specifically on:

- Mechanisms for applying the safeguards
- Safeguard information systems
- Plan for indigenous capacity development and participation
- Analysis of land holding
- Formalization of land rights



As noted in previous components, in April 2013 an international workshop was held under the auspices of UNREDD-NJP, entitled “Environmental, social, and human rights safeguards,” and “Construction of a route map for implementing a dispute settlement mechanism,” with the objectives of moving towards the creation of a safeguard information system, sharing experiences on mechanisms to ensure adequate management of disputes that may arise from the implementation of REDD+ activities. Also, the formation of groups, public roundtables on issues related to the safeguards and dispute settlement mechanisms.

In this workshop, the FAPI noted that, based on the experiences of other agencies and safeguard initiatives, four elements are essential for constructing and sustaining a national safeguards system:

- I. A set of principles, policies, standards (laws and regulations)
- II. An implementation system
- III. An information system
- IV. An independent compliance/grievance redress mechanism

Accordingly, the number two indicator becomes fundamental for system effectiveness; and adequate time and resources will be needed to design, equip, and establish it.

In addition, indicators have been identified that could be considered in the implementation of the safeguard information system, such as:

- Training activities for civil servants on the issue of safeguards.
- Practical steps taken to apply the safeguards (at the national and subnational/local levels)
- Steps taken to ensure full and effective participation by indigenous peoples and prior bona-fide consultation with them.
- Steps taken to identify, clarify, and ensure the territorial and land rights of indigenous peoples at the national and subnational levels.
- Restructure and strengthen state institutions, particularly the INDI.
- Set up teams and/or an intersectoral governmental organization for safeguards compliance with adequate powers and resources (national and subnational), responsible for the application of FAPI and UN-REDD safeguards, along with the related legal regulations and obligations (national and international).

Together with an organized effort to establish the four elements mentioned above, it is very important to recognize and promote the elements of safeguard work in the NJP and its work plan. Some of the key elements related to the commitments on safeguards in the NJP are described in the annexes to this proposal.



Many of the analyses already planned in the NJP relate to the construction of an effective safeguards framework, because the activities involve studies of gaps and strengths, consistency between norms and institutions, and the construction of a baseline on rights to land and territory for indigenous peoples. SEAM, INFONA, FAPI and Paraguay's UN-REDD program could compile a matrix of safeguard actions already under way or planned, to ensure coordinated and timely work and avoid duplication of efforts, which could be strengthened with actions considered in the FCPF framework.

This matrix could list each norm and principle of the relevant safeguards already established under international commitments and in the UN-REDD guidelines. The matrix could thus record the relevant actions in the NJP while also indicating additional actions required to make progress in constructing a national safeguards system, as detailed below.

Similarly, in the context of the FAPI presentation at the International Safeguards Workshop held in April 2012, actions have been identified as necessary for effective implementation of the safeguards system, including the following:

Table 17

ACTIONS NEEDED FOR THE EFFECTIVE IMPLEMENTATION OF A SAFEGUARDS SYSTEM

- Training for civil servants on the issue of safeguards.
- Launch a participatory national process to review laws and the legal framework for comparing international agreements
- **Ensure consistency between national and international regulations and laws with the norms of local government** (e.g. organic charters and norms of departmental and district governments): review and updating processes).
- Restructure and strengthen state institutions, particularly the INDI
- Set up teams and/or an intersectoral governmental organization on safeguards compliance with adequate powers and resources (national and subnational), responsible for the application of FAPI and UN-REDD safeguards along with the related legal regulations and obligations (national and international).

In terms of capacity strengthening for linking to a safeguards information system, the following needs have been identified:



Table 18
CAPACITY STRENGTHENING FOR IMPLEMENTING A SAFEGUARDS INFORMATION SYSTEM.

- For our leaders and communities on collective rights (topic of harmonization)
- Should be done in the communities within their territories
- On key REDD+ concepts and climate change at the level of communities and their organizations.
- Review and deepen each topic (concepts such as mitigation, safeguard, effective participation, greenhouse effect, the role of trees, photosynthesis, etc., etc.)
- Permanent training process.
- Through consultations, the state must respond to the demands on questions of its peoples and communities. Leaders must monitor the process with zonal and local indigenous leaders.
- The organization should always be genuinely representative throughout the process, and open to all needs of the affected community, taking all precautions to maintain calm in the community.

4. b.4 Monitoring of social and cultural impacts

The R-PP will draw on the experience of the UNREDD-NJP and consultations held with key stakeholders and sectors during its preparation and implementation phase, which began in 2009. Participants in this process have included community representatives, government institutions, producer organizations, entrepreneurs, technicians, and professionals. Although effective participation by the peasant farmer sector was not secured, this is a challenge for implementing the R-PP activities.

With the UNREDD-NJP, related activities have been implemented that make it possible to identify the multiple benefits provided by forests. The conclusion of this study will be available at the start of the second half of 2014. This information will be vitally important for designing an information system for multiple benefits, other impacts, governance, and safeguards. After the presentation of these results, the participatory design will be proposed with the representatives of relevant public and private stakeholders, involving continuous involvement by all relevant stakeholders, taking special account of peasant farmer groupings, women and young people, as populations that have a relationship of interdependency with the forests, with a view to conserving cultural aspects, their means of subsistence and ways of life. In particular, an evaluation based on three dimensions is proposed, which will be carried out in the initial phase by UNREDD-NJP, to later be complemented with activities in the implementation of the R-PP.

- ◆ **Social participation:** an effective policy for the management of forests requires major functional coordination between the entities involved, firstly in the public sector and secondly among entities in the non-public sector, including indigenous peoples, peasant



farmers, women's groups, young people, and other forest dwellers. The close interrelationship that exists between all natural resources and human activities requires coordination from all economic and social sectors which, one way or another affect or are affected by the status of the natural resources. For that reason, in constructing the safeguards system, consideration will be given to processes that involve the population participating in actions that contribute to the sustainable management of forest ecosystems, to be able to prevent or reduce deforestation and forest degradation, consistently with the approaches and needs of rural communities that obtain their livelihoods from forest environments. This participation will occur at both the national and the departmental levels. In addition, synergies will be developed with the environment departments of the governorships participating in the National Environment Council (CONAM).

- ◆ Basic services: related to the availability of, and adequate public access to basic services such as: education, health, housing, food security, and infrastructure that promotes adequate development of human capital in the territories in which REDD+ activities are implemented.
- ◆ Economic: participation in economic activity and enjoyment of adequate conditions to generate enough income for a decent standard of living in zones where REDD+ activities are implemented.
- ◆ Cultural: respect for their beliefs and sacred sites that have been identified and are located in the area of potential REDD+ programs.

4b. 5 Monitoring of environmental issues

4b. 5.1 Biodiversity

Paraguay has ratified the main multilateral treaties on the environment and is a signatory of other recent multilateral agreements on forests. The Convention on Biological Diversity (CBD) "Reiterates the importance of cooperation among the biodiversity-related conventions, the Rio conventions and other relevant instruments for achieving" its full implementation. Hence the recognition of "the importance of enhancing synergies among the biodiversity-related conventions, in particular at the national and departmental levels," the latter representing the guiding premises for applying the three conventions that emerged from the Earth Summit (Rio 92).

The CBD proclaims the integration of "biodiversity considerations in climate change related activities" taking the following into account:

- the "strengthening of knowledge and information on the linkages between biodiversity and climate change"
- The importance of activities to integrate biodiversity into relevant climate change activities and to ensure coherence in national implementation of both the UNFCCC and the CBD; and, as has been repeated:
- Collaboration between the Rio conventions (including that on desertification and drought) and the Global Environment Facility (GEF)



In the aforementioned decision, the Conference of the Parties (COP) encouraged the countries that were parties to the Convention and other governments to:

- “Take into account the importance of traditional knowledge, innovations and practices related to biodiversity when addressing the impacts of climate change in sectoral plans and strategies, especially when considering vulnerable communities.
- Strengthen knowledge and information, including comparable data sets, and related research and monitoring activities on the linkages between biodiversity, climate change and human well-being in educational programs at all levels.
- Promote synergies between biodiversity and climate-change policies and measures.
- Recognize the significant role that protected areas, restored ecosystems and other conservation measures can play in climate-change-related activities.
- Support the strengthening of inventorying and monitoring of biodiversity and ecosystem services at appropriate scales in order to evaluate the threats and likely impact of climate change and both positive and negative impacts of climate-change mitigation and adaptation on biodiversity and ecosystem services; and
- Consider reviewing land-use planning with a view to enhancing ecosystem-based adaptation to climate change,” such as the function of spaces containing restored forests for tourism purposes.

The COP also invites parties and other governments to reduce the risk of displacement of deforestation and forest degradation to areas of lower carbon value and higher biodiversity value, and other adverse impacts to biodiversity and to indigenous and local communities. The Conference of the Parties is concerned, among other reasons, because “when designing, implementing and monitoring and afforestation, reforestation and forest restoration activities for climate change mitigation,” it is necessary to “consider conservation of biodiversity and ecosystem services by:

1. Converting only land of low biodiversity value or ecosystems largely composed of non-native species, and preferably degraded ecosystems;
2. Prioritizing, whenever feasible, local and acclimated native tree species when selecting species for planting;
3. Avoiding invasive alien species;
4. Preventing net reduction of carbon stocks in all organic carbon pools;
5. Strategically locating afforestation activities within the landscape to enhance connectivity and increase the provision of ecosystem services within forest areas;

For that reason, Paraguay will develop the synergies needed to exploit the co-benefits, which in this context are benefits deriving from REDD+ other than those related to climate change, such as an improvement in biodiversity, improvements in adaptation to climate change, poverty relief, improvements in local livelihoods, better forest governance and protection of rights.

In Paraguay the greatest challenge relating to REDD+ policies is to establish a set of safeguard policies that can be implemented, monitored, and applied at a relatively low cost, and which are attractive for carbon investors, so that these actions do not harm people who



live from forest services, and taking account of the fact that the forest is also one of the main contributors to the conservation of biodiversity.

In addition to exploiting the learning-by-doing modality, additional research is needed on the effects of REDD+ policies on biodiversity, without forgetting that this mechanism is a measure for mitigating the adverse effects of climate change, and that the latter should provide the platform on which species, including human populations, continue to adapt to it.

4 b.5.2 Other co-benefits including strengthening with indigenous cultures and their relation with their higher beings

Forests also contain over 80 percent terrestrial biodiversity, and play a major role in the carbon cycle. In addition, they provide a wide range of essential ecosystem services: they regulate the water cycle and represent a buffer against threats such as floods and droughts, and their effects. The forest is the most complete and effective defense against soil erosion. Sustainable agriculture and forestry can reverse land degradation and help combat desertification. The contributions made by forests to food security and livelihoods are complemented by agriculture. Forests provide goods and services in support of the agriculture sector; they produce benefits for livestock production in the form of forage and tree shade. Forest ecosystems provide varied wood and non-wood products that are intrinsically natural and recyclable, and they also provide protection for natural landscapes, recreation, and ecotourism.

The co-benefits will be monitored in strategic territories, in which there are locally created structures for the purpose. In the case of water resources, the focus will be on micro-watersheds that supply water for human consumption, with participation by organizations that have water management responsibilities, such as ERSSAN, SENASA and others operating in the sector.

The reduction of erosion and sedimentation will be monitored on the basis of information obtained from studies conducted in the river basins of the country's main water catchment areas. Information relating to natural threats and risks (floods, landslides) will be obtained in coordination with the National Emergency Department [*Emergencia Nacional*] and institutions comprising the system for natural disaster prevention, mitigation and response.



Budget 4b. Design of an information system for multiple benefits						
Main Activity	Sub-Activity	Estimated Cost in thousands of US\$				
		2015	2016	2017	2018	Total
Implementation of the system	Capacity development	10	10	10		30
	Define criteria for monitoring indicators for Paraguay	10	10			20
	Institutional support for implementation	30	30	10	10	80
Development of the safeguards information system	Consultation on indicators and criteria	30	30			60
	Development of information plans	20	20	10		50
	Testing of the system and corrections	30	20	10		60
Implementation of the system	Inclusion in the carbon system	30	20	10	10	70
	Reporting and verification schemes	10	20	10		40
Total		170	160	60	20	410
Government		10	30	20	10	70
FCPF		30	130	40	10	210
UN-REDD		30				30
Bilateral cooperation from Japan		100				100



Component 5: Schedule and Budget

The proposal of the Republic of Paraguay for the preparation phase amounts to a total of US\$5,890 million over a four-year period, of which US\$1 million has been committed by the Paraguayan government in goods and services, and US\$565,000 correspond to joint activities with UNREDD-NJP. During the first year there will be US\$540,000 in equipment and mobility for regional offices through bilateral cooperation from Japan, and US\$3.8 million are requested from the FCPF to cover the calculated shortfall in resources needed to fulfill an implement the activities proposed in each component.

20 percent of the general budget represents the Strategic Options component (2b), which prioritizes aspects of governance, capacity strengthening and thematic studies, which are fundamental for reducing the direct and underlying causes of deforestation and forest degradation.

55 percent of the general budget covers the Dialogue-Participation and Monitoring components (1 and 4). These components stress consultation processes involving free, prior, and informed consent, as well as the definition of principles, criteria, and indicators to monitor the environmental and social services and benefits.

23 percent of the general budget is absorbed by items 2a, 2c, 2d, and 3, corresponding to the analysis of land use change, the implementation framework, and general evaluation of the R-PP.

67 percent of the general total budget will be executed in the first two planning years, to establish adequate governance conditions and national dialogue for the implementation and investment phase.

NOTE: This budget includes expenses on aspects of human resources and logistics, which normally become operational constraints for implementing projects in Paraguay.



Components	Estimated cost in thousands of US\$				
	2015	2016	2017	2018	TOTAL
Component 1: Organization and holding of consultations					
Budget 1a: Summary of activities and budgets for the national preparation management mechanisms	280	395	305	245	1,225
Budget 1b: Summary budget for the exchange of information and initial dialogue with the main stakeholder groups	130	50	40	30	250
Budget 1c: Summary budget for the consultation and participation process	170	125	105	70	470
Summary component 1	580	570	450	345	1,945
Component 2: REDD+ strategy preparations					
Budget 2a: Summary budget for the evaluation on land use, the causes of land use changes, forestry law, policy and management	170	120	55	35	380
Budget 2b: Summary budget for the REDD-plus strategy options	145	445	345	265	1,200
Budget 2c: Summary of the budget for the REDD-plus execution framework	75	115	75	35	300
Budget 2d: Summary budget on the social and environmental impact during REDD-plus preparation and execution	95	120	80	30	325
Summary component 2	485	800	555	365	2,205
Component 3: Development of a national reference level for forest emissions or a national forest reference level					
Budget 3: Summary budget for the reference level of forest emissions	130	150	55	20	355
Summary component 3	130	150	55	20	355
Component 4: Design of national forest monitoring systems and safeguards information					
Budget 4a: Summary budget on national forest monitoring and management	660	200	40	10	910
Budget 4b: Summary budget on noncarbon activities	170	160	60	20	410
Summary component 4	830	360	100	30	1,320
Component 6: Design of a program monitoring and evaluation framework					
Budget 6: Summary of the M&E program budget	20	20	20	20	80
Summary component 6	20	20	20	20	80
TOTAL	2,045	1,900	1,180	780	5,905
Government (*)	295	325	225	155	1,000
FCPF	645	1,575	955	625	3,800
UN-REDD	565	0	0	0	565
Bilateral cooperation from the Japanese Government (**)	540	0	0	0	540
Grand TOTAL	2,045	1,900	1,180	780	5,905

(*) Government counterpart in goods and services: human resources, building structure, services (water, electricity, telephone, Internet). Structures of regional offices. Mobilit.

(**) Counterpart in the framework of the project entitled "Forest preservation: provision of equipment and vehicles for regional offices of INFONA" SEAM UNA.



Component	US\$ thousand
Component 1: Organization and consultation	1,945
Component 2: Preparation of the REDD-plus strategy	2,205
Component 3: Development of a national reference level of forest emissions or a national forest reference level	355
Component 4: Design of national forest monitoring and safeguards information systems	1,320
Component 6: Monitoring and tracking	80
TOTAL	5,905



Component 6: Design a Program Monitoring and Evaluation Framework

**Standard 6 the R-PP text needs to meet for this component:
Design a Program Monitoring and Evaluation Framework**

The R-PP adequately describes the indicators that will be used to monitor program performance of the Readiness process and R-PP activities, and to identify in a timely manner any shortfalls in performance timing or quality. The R-PP demonstrates that the framework will assist in transparent management of financial and other resources, to meet the activity schedule.

6.1 Presentation

The objective of this component is to generate a framework for supervising and controlling the adequate implementation of the work program on the “Reduction of emissions caused by deforestation and forest degradation” in Paraguay. Specifically, its aim is efficient, effective, and transparent management of resources used in the process and fulfillment of the targets, outcomes, and outputs in the form and time required.

This framework also makes it possible to identify potential gaps, failings in results or performance during the implementation of the work program, and thus the basis for eventual corrections in the process of developing the country’s preparation for a REDD+ mechanism.

6.2 Logic of the procedure

This is a general framework that makes it possible to logically track the general elements of this proposal and its main features. In the first months of implementation of the “Reduction of emissions caused by deforestation and forest degradation” program in Paraguay, a more detailed strategic plan will be developed to make it possible to specify activities and terms of reference, at the level of operational plans, along with the development and implementation of the components, using specific logical frameworks for each component and subcomponent.

1. The mechanism responsible for developing the “Reduction in emissions caused by deforestation and forest degradation” program in Paraguay will be the National Technical Group, under political guidance from the Policy Committee, with technical assistance from the National Program on Climate Change, and implementation support from the REDD+ Operational Unit. These mechanisms will receive feedback from the National REDD+ platform in Paraguay, and international partners designated for the purpose.



2. The Policy Committee, acting through the Minister, Executive Secretary of SEAM, will report to CONAM on progress in implementing the actions proposed in the R-PP.
3. The implementation of actions for the “Reduction of emissions caused by deforestation and forest degradation” in Paraguay, will seek not only to verify progress made in carrying out the actions and achieving the outcomes and outputs as such, but also to verify the quality of the outputs and outcomes, and the extent to which they meet the standards set, or to be set, for both participatory and consultative processes.
4. The institutions and organizations that participate in the technical group referred to in component 1a of this proposal will have a monitoring and tracking role in respect of the actions to be implemented by the Operational Unit, and will report progress to the Political Committee and to the corresponding mechanisms.
5. Fulfillment of these standards will also ensure that the national proposals are consistent with the requirements of the relevant international processes and initiatives (UNFCCC, IPCC), thereby helping to attract future international investments in REDD+ programs in Paraguay.

A general matrix on the monitoring and evaluation framework to be followed in this preparatory proposal is set out below:



Table 19 Monitoring and Evaluation Framework

Components of the proposal in preparation	Outcomes for this component	Outputs for each component	Main activities	Sub-activities	Qualitative or quantitative indicators for each output or activity	Indicator timeframe			
						2015	2016	2017	2018
1a.	Organization of the participation and consultation	Efficient, effective, and transparent management of preparation	Develop REDD+ training mechanisms for the public/private sector in conjunction with private/public education entities	Courses /workshops/trainers indigenous sector	Workshop minutes List of participants by gender and age Pre- and post-workshop evaluation				
				Courses /workshops for small/peasant farmers	Workshop minutes List of participants by gender and age Pre- and post-workshop evaluation				
				Courses /workshops public sector	Workshop minutes List of participants by gender and age Pre- and post-workshop evaluation				
				Courses /workshops private sector (agricultures, forestry)	Workshop minutes List of participants by gender and age Pre- and post-workshop evaluation				
				Courses /workshops for women/young people	Workshop minutes List of participants by gender and age Pre- and post-workshop evaluation				



			Support for participation in the REDD+ process	Design and implementation of mechanisms for joint participation with local/indigenous communities in regional and national mechanisms	Mechanism designed and implemented Seminar minutes List of participants by gender and age				
				Institutional strengthening of the indigenous sector and INDI	Institutional capacities strengthened				
				Regional institutional strengthening for REDD+	Regional entities strengthened				
				Strengthening of peasant farmer, women, and youth groups	Groups strengthened minutes and lists of participants by gender and age				
			Management of the REDD+ platform	National REDD+ coordination	Coordinator contracted				
				Support for adviser groups	Group formed and functioning				
				Financial management	Administrator contracted				
			REDD+ coordination unit	Personnel of the unit	Unit operating				
				Functioning of the technical group	Technical group set up and operating				
				Offices and equipment	Offices set up				
			Functioning of the Political Committee and CONAM	Functioning and meetings of the political committee and CONAM	REDD+ Policy Committee and Technical Group functioning.				
			PNCC strengthening	Functioning of the PNCC in REDD-related activities	Activities undertaken				
				Functioning of the ONCC	REDD-related activities undertaken				
			Lobbying	Lobbying sessions, political and economic actors, and decision makers	Lobbying activities undertaken.				



			International negotiation for Paraguay's positioning in the international arena and mobilization of REDD funds	Participation by national representatives in negotiating mechanisms	Paper prepared project profiles presented Minutes of meetings				
			Grievance and anticorruption mechanism	Evaluation of existing grievance and anticorruption mechanisms, indigenous/private sector					
				Evaluation of existing grievance and anticorruption mechanisms, indigenous/private sector	Reports presented Minutes of meetings List of participants				
				Participatory design of the mechanism	Minutes of meetings List of participants				
				Dispute settlement mechanism	Implementation reports				
				Implementation of the mechanism	Minutes of meetings List of participants				
1b.	Information exchange and early dialogue with the main stakeholder groups	Information satisfactorily complete for construction of the program's social and environmental safeguards	Early dialogue with key sectors	Preparation of route maps, crop-farming sector (family farming, soya, sugar) Preparation of route map with the livestock sector Preparation of route map for forest/management and reforestation sector Preparation of route map with energy and infrastructure	Workshops, seminars, roundtables held. Reports presented Minutes of meetings List of participants				
			Paraguay REDD-plus program communication and positioning strategy	Development and implementation of the communication strategy	Communication materials produced. Strategy validated and implemented.				



1c.	Consultation and participation process	REDD-plus program prepared taking account of the direct and indirect factors of deforestation and forest degradation, land tenure issues, resource management, gender, correctly identified safeguards, and with full participation by stakeholders, local communities, and indigenous peoples.	Prepare a REDD-plus consultation plan for Paraguay	Complete the consultation plan	Consultation plan prepared and validated. Reports presented Minutes of meetings List of participants				
				Capacity development program	Reports presented Minutes of meetings List of participants				
			Implement the REDD-plus consultation plan	Consultation plan and application of corrections	Reports presented Minutes of meetings List of participants				
				Dissemination of the consultation plan	Reports presented Minutes of meetings List of participants				
				Communication instruments (videos, radio programs, posters, books, flip charts)	Materials designed, developed, and used.				
				Implementation of the consultation plan	PCP implemented. Minutes of meetings List of participants				



			Design and implementation of regional and national communication strategies by sector	Indigenous productive sector, civil society, rural women and young people	Communication strategy implemented. Reports presented Minutes of meetings List of participants				
2.a	Assessment of land use, land-use change drivers, forest law, policy and governance	Drivers of deforestation and degradation in each region of the country known	Specific studies on the sources of deforestation and degradation	Biomass, reforestation, and energy afforestation Impact on forest fires, compilation of drought scenarios Impact of electricity distribution projects Studies of land management by region	Causes of deforestation and forest degradation identified for each region. Reports presented Minutes of meetings List of participants				
			Additional economic analyses	Simulation in the national accounts of the impact of deforestation and reforestation scenarios	Economic analyses performed and validated Reports presented Minutes of meetings List of participants				
				Analysis of the opportunity costs of land use of main deforestation sources, and by area	Economic analyses performed and validated Reports presented Minutes of meetings List of participants				
				Small-scale family agriculture, its impact and alternatives to raise productivity	Economic analyses performed and validated Reports presented Minutes of meetings List of participants				
			Control and compliance with standards	Identification of gaps and proposal of solution to improve compliance with standards in the forest, agricultural and livestock sector completed	Reports presented Minutes of meetings List of participants				
2.b	REDD-plus strategy options	Priorities of the REDD-plus strategy options agreed upon	Economic analyses	Development strategies and simulation to 2030 of REDD strategies by region, source, and reduction measure completed.	Reports presented Minutes of meetings List of participants				



			Innovative financial mechanisms	Study on the REDD-plus Fund for resource management completed. Private/public financing sources identified. System of accounting, transfer from reduction units developed. Analysis of the legal framework for carbon certificates/(REDD) undertaken.	Reports presented Minutes of meetings List of participants				
				Public and private financing sources	Reports presented Minutes of meetings List of participants				
			Identification of reduction options	Program of energy reforestation and its impact on the use of biomass and consequent impact on CO2 emissions designed	Reports presented Minutes of meetings List of participants				
				Analysis of the legal framework for carbon certificates/(REDD)	Reports presented Minutes of meetings List of participants				
				Program of afforestation and reforestation and extreme poverty reduction designed	Reports presented Minutes of meetings List of participants				
			Agriculture and livestock sector	Institutional strengthening for the fulfillment of REDD-plus standards	Institutional strengthening for the fulfillment of REDD-plus standards in INFONA, STP MJT SEAM, undertaken				
				Incentive scheme for good agricultural and livestock practices, certifications, and market access	Incentive scheme for good agricultural and livestock practices, certifications, and market access and designed				
				Intensive livestock schemes and potential incentives	Intensive livestock schemes and potential incentives designed				
				Support for medium-sized and small (subsistence) family farming, incentives for agroforestry systems.	Reports presented Minutes of meetings List of participants				



			Conservation	Options for improving national protected areas systems identified					
			Testing of measures	Options for a tradable permits compensation market for the payment for environmental services (PES)/REDD identified	Reports presented Minutes of meetings List of participants				
				Pilot program for the western region designed	Progress reports presented Minutes of meetings Advance listing of participants				
				Pilot program for the eastern region designed	Reports presented Minutes of meetings List of participants				
			Legal and institutional framework	Proposal of legal frameworks for implementing selected measures	Reports presented Minutes of meetings List of participants				
				Social and carbon forest certification options	Reports presented Minutes of meetings List of participants				
				Environmental management plans of the territory	Reports presented Minutes of meetings List of participants				
				Strengthening of environmental and forest governance	Reports presented Minutes of meetings List of participants				
				Proposal to improve management in the national system of protected areas and their buffer zones	Reports presented Minutes of meetings List of participants				
2c.	Summary of the activities and budget on the	REDD-plus implementation	Additional studies	Studies on agricultural livestock and forestry certification schemes developed	Reports presented Minutes of meetings List of participants				



	REDD-plus implementation framework	framework implemented.		Analysis of commodity markets with good practices, carbon footprint, performed	Reports presented Minutes of meetings List of participants				
				Strengthening of public certification mechanisms	Reports presented Minutes of meetings List of participants				
			Legal framework	Promotion of the measurement of the carbon footprint performed, REDD-plus certificates	Reports presented Minutes of meetings List of participants				
				Analysis of legal definition (securities...) performed	Reports presented Minutes of meetings List of participants				
				Support for development and discussion of the 2014-2030 National Development Plan in the REDD climate change component	Reports presented Minutes of meetings List of participants				
				Discussion held on low carbon emission development schemes	Reports presented Minutes of meetings List of participants				
				Support the discussion on carbon rights and the required legislation	Reports presented Minutes of meetings List of participants				
			Strengthen REDD-plus implementation schemes	Capacity development on national and international economic, technical, and political topics	Reports presented Minutes of meetings List of participants				
				Support for participation in international meetings	Mission reports Minutes of presentations List of participants				
2d.	Evaluation of social and environmental impacts during REDD-plus	Social and environmental index during REDD-plus preparation and execution	Obtain an SESA analysis	Socioeconomic baseline in REDD-plus areas	Reports presented Minutes of meetings List of participants				
				Evaluation performed on human rights relating to indigenous land and territories	Reports presented Minutes of meetings List of participants				



	preparation and execution			Socioenvironmental and economic evaluation performed on REDD-plus programs and projects	Reports presented Minutes of meetings List of participants				
				Strengthening and adaptation of existing environmental impact mechanisms completed	Reports presented Minutes of meetings List of participants				
				Preparation of social and environmental safeguards completed	Reports presented Minutes of meetings List of participants				
			Participation by key players	Holding of seminars, roundtables, discussion panels, colloquia	Reports presented Minutes of meetings List of participants				
			Logistic support to the SESA Group	Management of the group.	Reports presented Minutes of meetings List of participants				
			Communication, consultation, and training	Specific workshops for the eastern and western region	Reports presented Minutes of meetings List of participants				
3	Reference level of forest emissions	National reference level established on the basis of regional levels.	Reference level (eastern, western, and national)	Independent evaluation of outputs and scheme of reference levels for Paraguay implemented	Reports presented Minutes of meetings List of participants				
				Scenario development	Reports presented Minutes of meetings List of participants				
				Strengthening of national capacities for implementing the national inventory system	Reports presented Minutes of meetings List of participants				
				Corrections identified and implemented, and field testing undertaken	Reports presented Minutes of meetings List of participants				
				REDD-plus initiatives registration and monitoring scheme	Reports presented Minutes of meetings				



					List of participants				
				Dissemination and capacity building	Minutes of meetings List of participants				
4a	Forest monitoring system	National capacity to measure and monitor emissions and extractions of GHGs owing to deforestation and forest degradation, conservation, improvement of carbon reserves, and sustainable management of the forests.	Implementation of a forest monitoring system to obtain maps of forested areas throughout the country	Strengthening of the National Forest Inventory for REDD-plus	Mission reports Minutes of meetings List of participants				
				Implementation of the SNMF	Reports presented Minutes of meetings List of participants				
				Training and strengthening of regional units for REDD-plus	Minutes of meetings List of participants				
				Training provided to local communities on field monitoring and verification	Minutes of meetings List of participants				
4b	Information system for multiple benefits, other impacts, governance, and safeguards	Capacity to measure key variables representing changes in the means of subsistence of the rural population, conservation of biodiversity, key management factors related to REDD implementation	Implementation of the information system for multiple benefits and safeguards	Capacity development undertaken	Minutes of meetings List of participants				
				Monitoring indicator criteria for Paraguay defined	Minutes of meetings List of participants				
				Institutional support for implementation provided	Minutes of meetings List of participants				



		and other impacts of the REDD+ strategy on forest management.							
			Development of the safeguards information system	Consultation on indicators and criteria	Minutes of meetings List of participants				
				Development of information plans	Minutes of meetings List of participants				
				Testing of system and corrections	Minutes of meetings List of participants				
			Implementation of the system	Inclusion in the carbon system					
				Reporting and verification schemes					
5	Scheduling and budget	Set of activities to achieve preparation for REDD-plus defined, with financing requirements to achieve the capacity and resources for undertaking these activities specified.	Preparation of schedule and budget	Preparation of work plans and budgets per year	Reports on disbursements to the parties.				
6	Program monitoring and evaluation framework	Monitoring and evaluation framework that makes it possible to monitor progress in the preparation, and to identify and	Preparation of the program monitoring and evaluation framework.	Annual work plans	Plans validated				
				Monitoring and evaluation framework	Monitoring reports				
				Program monitoring and evaluation	Midterm review				



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		address any disparities, deficits, and inadequate performance of the program that might occur.		Program regularly and systematically monitored and evaluated	Reports presented.				
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Budget 6: Monitoring and Tracking						
Main activity	Sub-Activity	Estimated cost (US\$ thousand)				
		2015	2016	2017	2018	Total
Semiannual monitoring scheme	Monitoring workgroup	5	3	3	3	14
	Meetings and workshops	5	5	5	5	20
Monitoring of REDD+ public and private pilot initiatives	Visits and monitoring	5	5	5	5	20
	Performance report	2	5	5	5	17
	Presentation of progress and communication	3	2	2	2	9
		20	20	20	20	80
Government		5	10	10	10	35
FCPF		10	10	10	10	40
UN-REDD		5				5