Funding Proposal

FP121: REDD+ Results-based payments in Paraguay for the period 2015-2017

Paraguay | United Nations Environment Programme (UNEP) | Decision B.24/09

4 December 2019
Funding Proposal
REDD-plus results based payments

Version 1.0
Accredited entities are expected to develop a funding proposal in close consultation with the relevant national designated authority and REDD-plus entity/focal point, in response to the request for proposals for the Pilot Programme for REDD-plus results based payments (Decision B.18/07). The funding proposal should follow the terms of reference of that Board decision and will be assessed per Stage 2 (sections 2 – 5) of the scorecard annexed to the same Board decision.

Programme Title: REDD+ Results-based payments in Paraguay for the period 2015-2017

Country: Paraguay

Results period in this proposal: 2015 – 2017

National Designated Authority: Technical Secretariat for Economic and Social Development Planning (STP)

REDD-plus entity/focal point: Ministry of Environment and Sustainable Development (MADES)

Accredited Entity: United Nations Environment Programme

Date of first submission/version number: 2019-06-17 [V.1]

Date of current submission/version number: 2019-10-10 [V.2]

Please submit the completed form to fundingproposal@gcfund.org
Please use the following naming convention in the subject line and file name:
“[Country] REDD-plusRBP FP-[Accredited entity]-yyyyymmdd”
### A. Proposed and projected REDD-plus results

<table>
<thead>
<tr>
<th>Period</th>
<th>Emissions (tCO₂e/year)</th>
<th>Reductions results (tCO₂e/year)</th>
<th>Total reductions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-2016</td>
<td>35,742,654.24</td>
<td>23,020,721.90</td>
<td></td>
</tr>
<tr>
<td>2016-2017</td>
<td>54,990,787.02</td>
<td>3,772,589.12</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>26,793,311.02</td>
</tr>
</tbody>
</table>

Source: Paraguay’s 2nd BUR – Technical Annex, 2019

#### A= Achieved volume of REDD-plus results offered to the pilot programme in this proposal (tCO₂e):

Indicate the volume of achieved results starting at the earliest 31 December 2013 that will be considered for the pilot programme.

**Total results:** 23,000,000.00 tCO₂e (2015/2016 and 2016/2017)

**Buffer:** 18% of total results (4,140,000 tCO₂e)

**Volumen presented for payments:** 18,860,000 tCO₂e

#### B= Expected volume of REDD-plus results to be achieved in the following years of the eligibility period (tCO₂e):

Indicate the results that are expected to be achieved in each of the subsequent years of the eligibility period (until 31 December 2018) that may be offered to the GCF for payments. Explain how the indicative volume of results is a significant volume for each subsequent year for the remainder of the eligibility period.

**Results to be achieved:** 13,300,000 tCO₂e (2017-2018; based on preliminary estimations)

**Only 7,000,000 tCO₂e are expected to be presented to the GCF in 2020.**

#### A+B =Total volume expected to be submitted to the pilot programme (tCO₂e):

Indicate the total volume, including the results achieved and offered to the pilot and the expected results to be achieved. The total expected volume could result from the submission of more than one funding proposal.

**SUM A + B**

30,000,000 tCO₂e (2015-2018)

### B. Carbon elements

#### B.1. Forest Reference Emission Level / Forest Reference Level (FREL/FRL)

Please provide link to the FREL/FRL submission:
[https://redd.unfccc.int/files/paraguay_2016_frel_submission_modified.pdf](https://redd.unfccc.int/files/paraguay_2016_frel_submission_modified.pdf)

Please provide link to the UNFCCC Technical Assessment Report
[https://unfccc.int/resource/docs/2016/tar/pry.pdf](https://unfccc.int/resource/docs/2016/tar/pry.pdf)
B.1.1. UNFCCC Technical Assessment and Analysis process

(i) Consistency of the FREL/FRL: Please provide any additional information that supplements the information contained in the Technical Assessment Report in relation to the consistency of the FREL/FRL with the GHG Inventory, including the definition of forest used. If the report identifies inconsistencies, explain these inconsistencies between the GHG inventory and FREL/FRL, and describe how they will be resolved in the next GHG inventory or FREL/FRL.

Paraguay submitted its first Forest Reference Emissions Level (FREL) on a voluntary basis on 4th January 2016, in accordance with Decision 12/CP.17. Technical evaluation of the FREL took place in March 2016, resulting in an exchange between the country and the Assessment Team (AT), which allowed Paraguay to provide the necessary clarifications and information to improve the transparency and consistency of the FREL.

As a result, Paraguay submitted a modified version of the FREL that considered the technical inputs provided by the Assessment Team (AT).

The FREL (modified version of the FREL Technical Assessment (TA) Conclusion) states as follows:

"The information used by Paraguay for the construction of the FREL for deforestation is overall transparent and complete and is in overall accordance with the guidelines for the FRELs information submission (as contained in the annex to Decision 12/CP.17)."

Consistency of the FREL/FRL with the GHG Inventory

Paraguay completed its 1st BUR in 2015, including the preparation of the National Greenhouse Gas (GHG) Inventory for the Land Use, Land Use Change and Forestry (LULUCF) sector. The Ministry of Environment and Sustainable Development (MADES) (formerly the Secretariat of the Environment) and the National Forestry Institute (INFONA) have coordinated activities within the national forest monitoring system (NFMS) development framework, to provide information on activity data and emission factors that can be used both for the National GHG Inventory and for the construction of the FREL, as well as for other national reports. For this reason, although there was a difference in the preparation and completion times, the methods used for both reports have been similar, only differing in some specific aspects (included gases and carbon pools) due to the different available information at the time each document was developed.

During the Technical Assessment the following inconsistencies were identified:

Forest Definition:

As part of the REDD+ readiness phase, Paraguay has facilitated discussion to agree on the national definition of "forests". As a result, the FREL (2016) states that "for REDD+ purposes "native forest" is defined as a natural ecosystem with biological diversity, intervened or not, regenerated and/or restored by natural succession or by forest enrichment techniques with native species, which produces goods, provides environmental and social services, with a minimum area of 1 hectare (ha), with a tree height equal to or greater than 3 meters (m) for the western region and equal to or greater than 5 meters for the eastern region, and reaching a minimum canopy cover in its natural state of 10% for the western region and 30% for the eastern region. It also includes native palms and bamboos that meet the indicated parameters. Natural tree protection strips equal to or greater than 60 m wide and equal to or greater than 1 ha are also included as forest. This forest definition excludes urban areas, grasslands, agricultural plantations, agroforestry systems and silvopastoral systems, where the main purpose is agriculture."

This definition is in accordance with the one used for the Greenhouse Gas Emissions Report of the National GHG Inventory for the LULUCF sector. The report was submitted as part of Paraguay’s 1st Biennial Update Report (BUR) (2015) and later in the 3rd National Communication (2017) and 2nd BUR (2018), in compliance with Decision 12/CP.17.

During the FREL TA, an inconsistency was identified in the definition used by the Forest Resources Assessment (FRA 2015). The document, published by FAO in 2015 and submitted by INFONA prior to the FREL, refers to forest as “forest lands greater than 0.5 ha, 5 m in height, and 10% canopy cover”. Other definitions were also used within the framework of Law 2524 (Zero Deforestation Law for Paraguay's Eastern Region) and in the Clean Development Mechanism.

Paraguay’s response has been to clarify that the definition adopted for the FREL is the most up-to-date and that it results from an inter-institutional agreement reached as part of the country's REDD+ readiness framework. There is an agreement in place between MADES and INFONA to maintain the use of this definition for future reports, as was the case in the 2nd BUR National GHG Inventory, the 3rd National Communication.
and with the REDD+ Technical Annex. Additionally, future reports under the UNFCCC and the upcoming FRA report will use the same forest definition.

In the consultation process with the AT, additional clarifications were made with regard to the technical soundness of the methodology and remote sensing images (medium spatial resolution, 30 by 30 m) used for the forest cover analysis, which are not capable of detecting forest cover below a 30% threshold.

As a result, Paraguay has included these technical limitations as areas for future improvement. MADES and INFONA are currently analyzing satellite imagery from the Sentinel 2 sensor (European Space Agency), which have a higher spatial resolution (spatial resolution is 10 by 10 m and 20 by 20 m for different wavelengths). These images will be evaluated and validated to ensure the integration or comparability of the results.

Gases and carbon pools included
The FREL construction used preliminary information from the National Forest Inventory (NFI) for the Bosque Subhúmedo del Cerrado (BSHC) and for the Bosque Sub Húmedo Inundable del Río Paraguay (BSHIRP) strata, which was considered more reliable than the default data from the IPCC Guidelines. Since the National GHG Inventory for the LULUCF sector of Paraguay’s 1st BUR (2015) had to be completed before the FREL, the default values proposed by the IPCC good practice guides (2003 GPGs) were the ones adopted. These default values have a high associated uncertainty level, as they were estimated at a regional scale.

Another difference is that Paraguay’s LULUCF National GHG Inventory (1st BUR) considered the variation of carbon pools over a full year to calculate emissions and removal to estimate the total CO2 flux. For this, IPCC default values were used. For the FREL, only CO2 emissions from forest land conversion (native forest) were considered, assuming that post-conversion carbon pools have a value of zero.

Paraguay has also clarified that there are differences in terms of carbon pools and reported gases. For the FREL, only Above and Below Ground (AGB, BGB) living biomass pools and biomass of understory vegetation and CO2 emissions were included.

Paraguay's FREL mentions that the LULUCF’s National GHG Inventory only reports on CO2 (Carbon Dioxide) and N2O (Nitrous Oxide equivalent) emissions. The reason for this difference is data availability for the FREL’s entire analysis period.

In response to this observation from the TA, Paraguay explained that the omission in the FREL is due to the fact that according to the National GHG Inventory (LULUCF) for the reporting year, N2O emissions were 8.98 Gg N2O which corresponds to 2,676.04 Gg CO2e (using a global warming potential value of 298) which represents less than 10% of the emissions in relation to CO2 equivalents; therefore, it is not considered a significant source of emissions.

The TA found that the Nitrous Oxide exclusion is justified based on the information provided. Also, it considers that the treatment of gases other than CO2 should be included as areas for future improvement given the transformation characteristics of Paraguay's native forest.

Paraguay's response confirms the need to include these improvements in the country's future estimates. During the FREL construction and evaluation, this was not possible due to limited time and resources. Limitations on activity data were also mentioned; Paraguay's response has acknowledged the need to make improvements, for example by obtaining complete spatial data on wildfires for the period 2000-2015, as well as data on post-deforestation land use, to include in future reports.

A further difference mentioned in the FREL is the inclusion of Above Ground Biomass, Below Ground Biomass and Understory Vegetation Biomass. Living roots with diameters of less than 2 mm, carbon from dead organic matter (dead wood, litter) and carbon found in soil (whether mineral or organic) were not considered. However, in addition to the living biomass, the LULUCF National GHG Inventory reported data on soil carbon pools (mineral soils), as the contribution to CO2 emissions was considered significant (39.1%) for the reported year.

Paraguay justified its decision to exclude this carbon pool from the FREL because the available information is only for "forest soils" of mineral origin, with no additional information available on the volume of emissions in the transfer/exchange in land use after the native forest conversion.

The country has also mentioned that there are not enough studies or scientific research in the country that could justify including data on "organic soils", as reported in the 2nd National Communication (2011).
During the assessment of the FREL’s carbon pools and gases, the evaluating team considered that the omissions of pools and gases are probably conservative in this context.

**Improvement Plan**

In response to these observations, Paraguay is making continuous efforts to enhance the information and data in accordance with the recommendations.

In this regard, after the conclusion of the FREL, the National Forestry Institute continued with the collection and analysis of data to complete and obtain final results for all native forest strata in Paraguay, including data on dead wood, leaves and mineral soils.

Part of these efforts focus on the remeasurement of 50% of the sampling units in 2018 and 2019, as well as to plan the remeasurement of the remaining sample units in 2020 and 2021, and to start the measurement of new sample units in a proportion of 25% in 2020 and 2021, and an additional 25% in 2022.

With regard to the forest cover dynamics, there are plans to obtain better data on post-deforestation land use and to start gathering data on soil carbon in these areas of non-forest land use.

The country has also made progress to improve its national capacities to implement the 2006 IPCC Guidelines for the AFOLU sector in its country reports. These efforts are aimed mainly at helping the country to eliminate inconsistencies between the LULUCF National GHG Inventory and future FREL improvements and/or updates.

(ii.a) Data source of the FREL/FRL: Please provide any additional information that supplements the information contained in the Technical Assessment Report in relation to the data used for to the construction of the FREL/FRL, specifying whether the FREL/FRL is based on historical data and is equal to or below the average annual historical emissions during the reference period.

Developed in 2016, based on historical gross deforestation data, Paraguay’s Forest Reference Emissions Level represents estimated emissions of 58,763,376.14 tons of CO₂ equivalent per year, totaling 881,450,642.15 tons of CO₂ equivalent emissions for the total period of analysis (15 years from 2000 to 2015).

This calculation was obtained by combining activity data (gross deforestation for native forest strata) with their respective emission factors for each native forest strata.

**Activity Data**

The development of Paraguay's FREL is based on historical data of forest cover changes for a 15 year period (2000-2015). The FREL covers the entire Paraguayan territory (approximately 406,752 km²).

The changes that occurred between 2000 and 2015 are determined by the analysis of four periods: 2000-2005, 2005-2011, 2011-2013, and 2013-2015. The years were selected based on the time and resources available to support the country through the REDD+ readiness phase, and with the specific objective of building the FREL. Also, the selected period was aimed at generating data for the country’s LULUCF National GHG Inventory (2015) and for the 3rd National Communication (2017) and subsequent reports to be developed according to the country's commitments, among them the Forest Resources Assessment (FRA) report.

To create the country’s historical deforestation data, different steps were taken. First a forest cover map for the year 2011 was generated; then a forest cover map of the Bosque Palmar for the same year was generated. These maps were put together in a new map containing both maps and the corresponding native forest strata of the National Forest Inventory, which are: i) Bosque Húmedo de la Región Oriental (BHRO); ii) Bosque Subhúmedo del Cerrado (BSHC); iii) Bosque Subhúmedo Inundable del Río Paraguay (BSHIRP); iv) Bosque seco chacaeño (BSCH); y v) Bosque de Palmar (BP).

This map for the year 2011 combines the native forest and the Bosque Palmar forest maps and is the basis for later forest cover change analysis.
The analysis of the forest cover change was carried out in a two-step process, in which three types of cover were identified: stable forest, non-stable forest, and changes for the analyzed period. First, the analysis included the deforestation from 2011 backwards for the periods 2000-2005 and 2005-2011. Then, the analysis was performed from 2011 onwards for the periods 2011-2013 and 2013-2015.

During the TA the Assessment Team noted that the annualized average (2000-2005 and 2005-2011, 5 and 6 years respectively) may overestimate or underestimate the values for a particular year.

A further issue was raised during the TA regarding the Bosque Palmar, which does not have a spatially explicit change map, since it is located within the Bosque Subhúmedo Inundable del Río Paraguay (BSHIRP). Due to the Bosque Palmar’s characteristics, which has a highly variable tree density and canopy cover, it is difficult to accurately analyze it in a multi-temporal analysis.

In response, Paraguay stated that these considerations were considered, but due to timing, capacities and available resources they were included as areas for future improvements. Currently the country already possesses the necessary capacities to generate a Forest Cover Change Map on an annual basis, and it is expected to have a spatially explicit change map for Bosque Palmar by 2019.
Figure 2 Forest Cover Change Maps for the periods 2000–2005 and 2005–2011.
Figure 3. Forest Cover Change Maps for the periods 2011–2013 and 2013–2015.

Methodology for cartographic products
The methodology used by the Satellite Land Monitoring System (SLMS) to generate cartographic products was developed and gradually improved to achieve replicability, comparability and transparency and to ensure consensus in the processes. It includes the use of licensed software to analyze satellite imagery, through supervised classification processes to generate the first land cover/use maps; then, an object-based image analysis (OBIA) classification process was applied. Finally, the methodology uses open source software such as the Google Earth Engine to generate forest cover and land-use change maps (for different analysis periods from 2000 onwards). This last analysis is based on the classification of satellite image mosaics "in the cloud", which means that all the processing and data storage is carried out on a server that hosts the user's information (Paraguay’s 2nd BUR, Technical Annex; UN-REDD+ NCP, 2017).

Finally, the forest cover change maps generated (for the four periods) were evaluated for the assessment of uncertainties and errors associated with the methodology. This thematic accuracy assessment, whose methodology and results were made public, allowed the results to be constructed with unbiased values. The accuracy was estimated by an independent mapping team composed of remote sensing technicians from the Ministry of Environment and Sustainable Development. The division of responsibilities between the team generating the maps and the team evaluating them guarantees objectivity in determining the reliability of products.

The following table presents the total deforestation area per strata of native forest in hectares.

Table 1: Total deforestation area per strata of native forest

<table>
<thead>
<tr>
<th>Native forest strata</th>
<th>Period 2000 – 2015 Deforestation (hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bosque Húmedo de la Región Oriental (BHRO)</td>
<td>1,005,658.05</td>
</tr>
<tr>
<td>Bosque Seco Chaqueño (BSCH)</td>
<td>3,069,589.51</td>
</tr>
<tr>
<td>Bosque Subhúmedo del Cerrado (BSHC)</td>
<td>30,469.39</td>
</tr>
<tr>
<td>B. Subhúmedo Inundable del Río Paraguay (BSHIRP)</td>
<td>888,360.85</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,994,077.80</strong></td>
</tr>
</tbody>
</table>

Note: The Bosque Palmar is inserted within the B. Sub Húmedo Inundable del Río Paraguay, therefore, the conversion area in this stratum also includes losses in the Bosque Palmar, however they are not geographically explicit.
Emission Factor
To estimate the emission factor (EF), Paraguay used the IPCC good practice guidelines (2003) approach (Tier 1 and 2 approach; Tier 2 is based on the use of country-specific data).

The specific data generated for the country was used as part of the National Forest Inventory (NFI) that carried out the data compilation during 2014 and 2015 at the national level. According to the FREL document: "For the quantification of the total living biomass, allometric equations generated locally for the strata of Bosque Húmedo de la Región Oriental (BHRO), Bosque Seco Chaqueño (BSCH) and Bosque Sub Húmedo Inundable del Río Paraguay (BSHIRP) were used, as well as equations generated for the tropics (Tier 1) and expansion factors generated from the same local equations for the Bosque Sub Húmedo del Cerrado (BSHC)".

Table 2: Number of sample units established by the NFI per forest strata.

<table>
<thead>
<tr>
<th>National Forestry Inventory forest type (strata)</th>
<th>Sample Units (AGB y BGB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bosque Húmedo de la Región Oriental (Humid forest of Eastern Paraguay; BHRO)</td>
<td>45</td>
</tr>
<tr>
<td>Bosque Seco del Chaco (Dry forest of Chaco; BSCH)</td>
<td>39*</td>
</tr>
<tr>
<td>Bosque Subhúmedo del Cerrado (Sub-humid forest of Cerrado; BSHC)</td>
<td>30</td>
</tr>
<tr>
<td>Bosque Subhúmedo inundable del río Paraguay (Sub-humid flooded forest of Paraguay river; BSHIRP)</td>
<td>4</td>
</tr>
<tr>
<td>Bosque Palmar (Palmar forest; BP)</td>
<td>3*</td>
</tr>
<tr>
<td><strong>Total sample units established</strong></td>
<td><strong>121</strong></td>
</tr>
</tbody>
</table>

*Note: considering three sub-plots per conglomerate, for the Bosque Seco del Chaco they correspond to 117 plots in total, and for the Bosque Palmar 9 plots. For the understory, data processing corresponds to 109 plots for the BSCH and 16 plots for the BSHC.

Table 3. Allometric equations applied for the biomass determination for each native forest stratum

<table>
<thead>
<tr>
<th>Forest strata</th>
<th>Equation</th>
<th>( R^2 )</th>
<th>Unit</th>
<th>Author/Location</th>
</tr>
</thead>
</table>

The Bosque Palmar and the Bosque Subhúmedo Inundable del Río Paraguay strata presented a difficulty in associating the corresponding emission factor due to the lack of spatially explicit data for all periods of change (Bosque Palmar is inserted within the BSHIRP). See previous section for activity data on this point. In the original version of the FREL, Paraguay associated the emission factor with the BSHIRP activity data including the BP, but without any discrimination.

The Technical Assessment team made an observation on this point, considering that this calculation would overestimate the emission factor because the BSHIRP has an emission factor higher than the BP.

In response to this, Paraguay applied a weighted average by area (using as a reference the BP relative area in relation to the BSHIRP in 2011) to obtain an average result that applies to both the BSHIRP and the BP. This weighted average value of the emission factor allows the country to obtain a more conservative value regarding \( CO_2 \) emissions. Although the emission factors for each of the BSHIRP and BP strata are reliable, Paraguay must make improvements in the differentiation of spatially explicit changes for these strata. This was identified as an area of improvement as mentioned previously. Paraguay expects to have the Bosque Palmar Forest Cover Change Maps (for different periods) by 2019.

The data compilation made by the National Forest Inventory is based on the methodology described in the National Forest Inventory Field Manual (FAO 2015) and the calculations used are described in the NFI Data Processing and Analysis Methodology generated within the framework of Paraguay’s UN-REDD National Programme.

Use of Allometric Equations
The National Forest Inventory has used allometric equations (from both national and regional studies) developed for forest ecosystems or for tree species within the forest inventory.
|----------------------------------------------------------|

The AT assessed the use of Allometric Equations, and recommended comparing the results obtained from the application of allometric equations and those obtained from the calculation of geometric volume, including expansion factors, in order to increase the reliability of the selected method. The reason for this is that the method may not adequately represent each stratum due to the high diversity of species found in them.

Paraguay’s response has been to consider the Assessment Team's recommendation as an area for future improvement since there was insufficient time and resources for such a study at that moment. Currently, INFONA’s National Forest Inventory Technical Team, together with MADES, have considered completing the comparative calculations for both methods and analyzing the technical and economic feasibility of expanding the studies related to specific new Allometric Equations for Paraguay's native forest strata.

The preliminary data from the National Forest Inventory processing is the total living biomass obtained for the country's different forest types. To calculate this, the allometric equations generated at forest stratum level were applied to each tree independently of its species. The results were then extrapolated to a forest stratum level. Underground biomass was obtained through the subtraction of the result from total living biomass. The estimation of carbon and CO₂ equivalent content from tree biomass was made by applying the default average factor from the 2006 IPCC guidelines (value of 0.47 - average range 0.44 to 0.49) for subtropical forests over the estimated tree biomass outcome.
For the understory vegetation, the carbon fraction was calculated based on the NFI field samples which were analyzed in laboratory using the dry biomass combustion method, at a temperature of approximately 900°C.

Finally, for the emission factors calculation it was assumed that the biomass right after deforestation is equal to zero; therefore, it corresponds to the associated carbon content in each forest strata.

The following table presents the final values resulting from the emission factors construction process, obtained for each of the NFI strata, and the results of the weighted average mentioned previously.

### Table 4. Carbon content and CO₂ equivalent estimation (t/ha) for all forest strata.

<table>
<thead>
<tr>
<th>Native forest strata</th>
<th>Carbon – Above ground biomass (tC/ha)</th>
<th>Carbon – Under-ground biomass (tC/ha)</th>
<th>Carbon – Understory vegetation biomass (tC/ha)</th>
<th>Carbon – Total living biomass (tC/ha)</th>
<th>Total tCO₂e/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bosque Húmedo de la Región Oriental (BHRO)</td>
<td>*52,36</td>
<td>*6,59</td>
<td>*1,39</td>
<td>*60,34</td>
<td>221,28</td>
</tr>
<tr>
<td>Bosque Seco Chaqueño (BSCH)</td>
<td>23,63</td>
<td>12,28</td>
<td>2,90</td>
<td>38,81</td>
<td>142,3</td>
</tr>
<tr>
<td>Bosque Subhúmedo del Cerrado (BSHC)</td>
<td>51,33</td>
<td>13,73</td>
<td>0,12</td>
<td>65,18</td>
<td>238,99</td>
</tr>
<tr>
<td>Bosque Subhúmedo Inundable del Río Paraguay (BSHIRP)</td>
<td>**66,42</td>
<td>**22,83</td>
<td>**4,34</td>
<td>**92,69</td>
<td>339,86</td>
</tr>
<tr>
<td>Bosque Palmar (BP)</td>
<td>**17,06</td>
<td>**1,39</td>
<td>**1,4</td>
<td>**19,85</td>
<td>72,78</td>
</tr>
<tr>
<td>Bosque Subhúmedo Inundable del Río Paraguay (BSHIRP) y Bosque Palmar (BP) ***</td>
<td>***48,3</td>
<td>***14,96</td>
<td>***2,69</td>
<td>***65,95</td>
<td>*** 241,82</td>
</tr>
</tbody>
</table>

Observations: * These values correspond to the NFI field survey’s results for this stratum. ** These values correspond to the one used to calculate the weighted average carbon content. *** These values correspond to the values for carbon content and CO₂ equivalent, resulting from the calculation procedure of the weighted average of each.

Source: Adapted from Paraguay’s Forest Reference Emission Level, 2016.

In this way, the emission factors were generated for each of Paraguay’s native forest strata and applied directly. The results for Bosque Palmar and Bosque Subhúmedo Inundable del Río Paraguay used a weighted average procedure.

A (ii.b) If a country is considered HFLD: Please provide the basis/justification for this classification.

(N/A) Not applicable. Paraguay is not a HFLD country.
(ii.c) FREL/FRL adjustments for a HFLD country: If adjustments made, please provide information that the adjustment does not exceed 0.1% of the carbon stock over the eligibility period in the relevant area and/or exceed 10% of the FREL/FRL to reflect quantified, documented changes in circumstances during the reference period that likely underestimate future rates of deforestation or forest degradation during the eligibility period.

(N/A) Not applicable. Paraguay is not a HFLD country.

(iii) FREL/FRL in accordance with 12/CP.17: Please provide any additional information that supplements the information contained in the Technical Assessment Report in relation to the quantified estimate of the FREL/FRL. Include whether the FREL/FRL was constructed in accordance with the guidelines in Decision 12/CP.17; specifically on the modalities for FREL/FRL and whether the raised issues were material or not material to the quantified estimate of the FEEL/FRL.

For the construction of the Forest Reference Emissions Level, Paraguay has followed the guidelines of the UNFCCC in the Decision 12/CP.17 for the presentation of FREL/FRL in relation to:

a) Report the information used for the FREL construction.
b) Ensure transparency, consistency and accuracy in the methodological information used for the FREL construction process.
c) Report the pools, gases and activities included in the FREL.
d) Report the definition of forests used.

Paraguay has made a significant effort to present its first FREL and has also committed to strengthening its capacities through better methodologies and data use, in accordance with Decision 12/CP.17, paragraph 10, regarding the implementation of a step-wise-approach. However, some issues have been identified which are included as areas for future improvement in the FREL construction or revision.

Also, the issues observed by the TA did not identify significant issues for the FREL estimation.

Finally, according to the Technical Assessment, the information used by Paraguay for the construction of the FREL for deforestation is in overall accordance with the guidelines for the submission of information on FREL as contained in the annex of Decision 12/CP.17.

(iv) FREL/FRL transparency: Please provide any additional information that supplements the information contained in the Technical Assessment Report in relation to the transparency of the FREL/FRL and whether significant issues were raised and resolved. If applicable, provide a plan on how to address and overcome issues that were not material to the transparency of the FREL/FRL raised in TA Report that couldn’t be resolved due to time and data restrictions.

The exchange between the FREL AT and the Government of Paraguay allowed the identification of additional relevant information that contributes to the improvement and transparency of Paraguay’s FREL.

The original version of the FREL submitted included four annexes, which were further enhanced with the submission of the modified version of the FREL with two additional annexes, with the aim of improving transparency. The six annexes in the modified submission contain the following information:

1. A methodological description of the elaboration of the 2011 forest cover map, the 2011 Bosque Palmar map and land-use change maps;
2. The methodology used to assess the uncertainty and accuracy associated with land-use change maps;
3. A field manual for collecting data for the National Forest Inventory;
4. Data processing methods for the National Forest Inventory;
5. Preliminary information on soil and other carbon pools collected for the National Forest Inventory;
6. Reference information from other data sources on Bosque Sub Húmedo Inundable del Río Paraguay and Bosque Palmar.

The AT considered that transparency and completeness improved significantly with the submission of the modified FREL and commended Paraguay’s efforts.

The Government of Paraguay has made key information available online. Currently, both the FREL’s relevant information and the REDD+ Technical Annex Emissions Reduction Report presented in 2018 as part of the 2nd BUR are available online.
The following files can be found on the INFONA website (http://www.infona.gov.py/index.php/604):
- Scientific paper on Allometric Equations of Paraguay’s Forests.
- Scientific paper on Allometric Equations by Ceiba sp.
- National Forest Inventory Field Manual.
- FREL Emissions calculation.
- National Forest Inventory data processing methodology.

The website also includes the information used for the construction of the REDD+ emissions reduction results for the period 2015-2017 included in the REDD+ Technical Annex of the 2nd BUR.

In addition, Paraguay’s NFMS has an online Geo Web Portal that allows the visualization of georeferenced activity data and other relevant geographic data to enhance transparency, available here: http://snmf.infona.gov.py:8091/portal/.

(v) FREL/FRL completeness: Please provide any additional information that supplements the information contained in the Technical Assessment Report in relation to the understanding of the FREL/FRL and whether significant issues were raised and resolved. If applicable, provide a plan on how to address and overcome issues that were not material to the completeness of the FREL/FRL raised in TA Report that couldn't be resolved due to time and data restrictions. Include information that allows for the reconstruction of the FREL/FRL.

The interaction and facilitation process with the AT allowed Paraguay to submit a modified version of the FREL as described above.

The AT noted that the transparency and completeness of the information significantly improved in the modified FREL.

In an effort to enhance completeness, as mentioned in the previous section, the Government of Paraguay has made available the information used for the reconstruction of the FREL at http://www.infona.gov.py/index.php/604. As described in section B.1.(iii), this page contains the necessary information for the FREL reconstruction.

In addition to the information and data used, Paraguay has also made available details on the methodologies used for the FREL construction, as well as scientific and academic studies that support the decisions and the methodology applied in the process.

Finally, Paraguay has made corrections to errors identified during the evaluation processes and has provided a specific section on “Limitations and Reasons for Future Technical Improvement” according to the step-wise-approach.

(vi) FREL/FRL consistency: Please provide any additional information that supplements the information contained in the Technical Assessment Report in relation to the consistency of the methodology used over the time series used for the construction of the FREL/FRL, and whether significant issues were raised in the report and resolved. If applicable, provide a plan to address and overcome issues that were not material to the consistency of the FREL/FRL raised in TA Report that couldn’t be resolved due to time and data restrictions.

In the FREL’s construction process, Paraguay adopted a methodology that was applied for the entire time series period (2000-2015).

To this end, Paraguay has dedicated significant efforts in the development of activity data to analyze gross deforestation for the periods 2000-2005, 2005-2011, 2011-2013 and 2013-2015. This entailed using adequate and replicable tools and methodologies not only during the construction of the FREL, but also considering the generation of future maps.

Table 5. Annualized deforestation hectares (ha) per stratum of native forest
One of the limitations identified and described above refers to the unavailability of a spatially explicit Bosque Palmar cover change map for the analysis period. However, it has been identified as one of the areas for future improvements that will contribute significantly to an efficient and transparent application of the methodology.

For emission factors, the methodology used for their estimation is based on the methodologies and procedures for data collection contained in the National Forest Inventory Field Manual and in the procedures documented for calculating results elaborated for the NFI.

The emission factors presented previously in section B.1.1. (ii.a.) were applied to the entire time series of activity data from the previous table. This is an important contribution to the internal consistency for the FREL methodology.

Table 6. Annualized CO$_2$e emissions (in tons) by gross deforestation for each stratum of native forest.

<table>
<thead>
<tr>
<th>Year</th>
<th>Period of Analysis</th>
<th>B. Húmedo de la Región Oriental (BHRO)</th>
<th>B. Seco Chaqueño (BSC)</th>
<th>B. Subhúmedo del Cerrado (BSC)</th>
<th>B. Subhúmedo Inundable del Río Paraguay (BSHIRP)</th>
<th>Total Deforestation t CO$_2$/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2000 - 2001</td>
<td>26.358.201,87</td>
<td>17.039.748,35</td>
<td>293.925,95</td>
<td>10.073.625,30</td>
<td>53.765.501,47</td>
</tr>
<tr>
<td>2</td>
<td>2001 - 2002</td>
<td>26.358.201,87</td>
<td>17.039.748,35</td>
<td>293.925,95</td>
<td>10.073.625,30</td>
<td>53.765.501,47</td>
</tr>
<tr>
<td>3</td>
<td>2002 - 2003</td>
<td>26.358.201,87</td>
<td>17.039.748,35</td>
<td>293.925,95</td>
<td>10.073.625,30</td>
<td>53.765.501,47</td>
</tr>
<tr>
<td>4</td>
<td>2003 - 2004</td>
<td>26.358.201,87</td>
<td>17.039.748,35</td>
<td>293.925,95</td>
<td>10.073.625,30</td>
<td>53.765.501,47</td>
</tr>
<tr>
<td>5</td>
<td>2004 - 2005</td>
<td>26.358.201,87</td>
<td>17.039.748,35</td>
<td>293.925,95</td>
<td>10.073.625,30</td>
<td>53.765.501,47</td>
</tr>
<tr>
<td>6</td>
<td>2005 - 2006</td>
<td>10.030.242,42</td>
<td>33.870.283,77</td>
<td>593.217,30</td>
<td>15.856.511,28</td>
<td>60.350.254,78</td>
</tr>
<tr>
<td>7</td>
<td>2006 - 2007</td>
<td>10.030.242,42</td>
<td>33.870.283,77</td>
<td>593.217,30</td>
<td>15.856.511,28</td>
<td>60.350.254,78</td>
</tr>
<tr>
<td>8</td>
<td>2007 - 2008</td>
<td>10.030.242,42</td>
<td>33.870.283,77</td>
<td>593.217,30</td>
<td>15.856.511,28</td>
<td>60.350.254,78</td>
</tr>
<tr>
<td>9</td>
<td>2008 - 2009</td>
<td>10.030.242,42</td>
<td>33.870.283,77</td>
<td>593.217,30</td>
<td>15.856.511,28</td>
<td>60.350.254,78</td>
</tr>
<tr>
<td>10</td>
<td>2009 - 2010</td>
<td>10.030.242,42</td>
<td>33.870.283,77</td>
<td>593.217,30</td>
<td>15.856.511,28</td>
<td>60.350.254,78</td>
</tr>
<tr>
<td>11</td>
<td>2010 - 2011</td>
<td>10.030.242,42</td>
<td>33.870.283,77</td>
<td>593.217,30</td>
<td>15.856.511,28</td>
<td>60.350.254,78</td>
</tr>
</tbody>
</table>

Source: Paraguay’s Forest Reference Emission Level 2016.
(vii) FREL/FRL accuracy: Please provide any additional information that supplements the information contained in the Technical Assessment Report in relation to the accuracy of the FREL/FRL and whether significant issues were raised and resolved. This should include information on whether the data and methodologies used neither over- nor under-estimate emissions and/or removals during the reference period. If applicable, provide a plan to address and overcome issues raised in TA Report that were not material to the accuracy of the FREL/FRL and that couldn’t be resolved due to time and data restrictions.

The accuracy of the Reference Level can be determined based on the assessments made for both activity data and emission factors.

During the FREL construction, the lack of spatially explicit maps for the Bosque Palmar has been identified as one of the issues to be addressed, since it is currently included within the Bosque Subhúmedo Inundable del Río Paraguay. The solution proposed by Paraguay has been to apply a weighted average calculation considering the area of each of its strata.

The AT considers this to be an interim solution. However, they stated that palm areas should be treated as an independent stratum for the determination of activity data and corresponding emission factors. This will improve the accuracy of the estimates and avoid potential over estimation of emissions.

As mentioned previously, Paraguay has taken into consideration the observations of the AT, and adopted the proposed solution as an interim measure due to time and resource limitations to generate additional maps. The first Bosque Palmar cover change map for different periods of analysis are expected to be completed by 2019. The results will be used in the future to improve the FREL’s calculations and to report results.

Accuracy of Activity Data

Paraguay has also provided information on the accuracy of the two land-use change maps for the periods 2000-2005-2011 and 2011-2013-2015, including a detailed description of the methodology. For uncertainty estimation see section B.1.2. (xv) Uncertainties.

Accuracy of Emission Factors

The FREL contains information on the assessment of the associated uncertainty of carbon content in each of the native forest strata for above-ground biomass, below-ground biomass and understory vegetation biomass pools.

The AT commends Paraguay for the development and provision of specific information on uncertainty, accuracy and ongoing efforts to increase the accuracy of emissions in future releases.

Paraguay has taken these issues into account and has incorporated them as part of future improvement plans under the step-wise-approach.

(viii) Sources of emissions: Please provide any additional information that supplements the information contained in the Technical Assessment Report in relation to whether all activities listed in paragraph 70 of UNFCCC decision 1/CP.16 (“REDD-plus activities”) that are a significant source of emissions were included. If they were not, justify whether activities that are significant sources of emissions were not included due to lack of data and/or whether the omission overestimates emissions or underestimate removals. Provide also a plan to include all data on all REDD-plus activities that are significant sources of emissions in future FREL/FRL submissions.

Paraguay has elaborated its first Forest Reference Emission Level including only gross deforestation of native forest as a REDD+ activity.

The Technical Assessment team acknowledged the fact that Paraguay included in the FREL the most significant activities and pools in terms of deforestation emissions. The FREL also mentions that the activity of “reducing emissions from the degradation of native forest” is in the discussion and analysis stage, so it was not considered appropriate to include information on this topic at this stage.

Paraguay is currently finalizing the first studies to agree on a national definition for degradation and to determine the methods and processes for generating activity data and its corresponding emission factors.
The National Forest Inventory is one of the key sources of information for analyzing native forest degradation. Within the framework of the inventory, there are plans to carry out remeasurement of the five different strata and include new plots (sample units).

(ix) Significant pools: Please provide any additional information that supplements the information contained in the Technical Assessment Report in relation to the inclusion of the most significant pools. If applicable, justify whether significant pools were not included due to lack of data and/or the omission does not overestimate emissions or underestimate removals. In addition, provide a plan to include all significant pools in future FREL/FRL submissions.

Paraguay has prioritized above-ground biomass, below-ground biomass and understory vegetation biomass.

After evaluating the pools and gases included in the FREL, the TA observed that the omissions of pools and gases are probably conservative. Additionally, it identified the following areas for future technical improvement.

- Collection of data on the dynamics of carbon content in deadwood, litter and mineral soils after forest conversion to determine their significance in terms of emissions.
- Collection of the necessary information to estimate emissions from deforested organic soils or to justify their omission.
- Treatment of other emissions of other gases (other than CO₂) and emissions from slash and burn conversion.

**Action Plan for future technical improvements**

Since 2018 the NFMS is endorsed by Law No. 6256 to provide official information on the state of national forest cover on a periodic, measurable and verifiable basis. The structure of coordination between MADES and INFONA is currently in the process of being regulated by an Official Decree.

The Government has proposed a flow chart for the NFMS (2nd BUR and BUR Technical Annex, page 271) that can be summarized in the following steps:

I. INFONA implements the National Forest Inventory (NFI) with the cooperation of MADES, for the generation of Emission Factors and the Satellite Land Monitoring System that generates the National Forest Cover Map and Land Use Change Map to obtain Activity Data;
II. MADES develops the Thematic Accuracy Assessment of the National Forest Cover Map and Land-Use Change Map and develops the National Greenhouse Gases Inventory which includes the LULUCF sector;
III. INFONA receives and incorporates the results from the Thematic Accuracy Assessment;
IV. MADES approves and incorporates the results in the National Communications, National GHG Inventories and BUR’s according to the UNFCCC mandatory reporting needs.

The coordination between the institutions has already started to contribute to the areas identified for future technical improvements. Areas that are in need of improvement were identified in the FREL and REDD+ Results construction processes, and in their corresponding evaluation processes, and include the following:

- Among the most important improvements identified, is the need to fully address and resolve the inconsistencies that have already been identified between the National GHG Inventory for the LULUCF sector and the FREL.
- Improve the capacities for the estimation of uncertainties both for activity data and for emission factors of the current results and of the data and results.
- Improve the technical capacity of officials, both in INFONA and MADES, in order to ensure the sustainability of the work.
- Within the National Forest Inventory Framework, it is planned to continue with the planned activities, which are the remeasurement of the NFI plots carried out in 2014 and 2015. Half of the remeasurement of plots will be completed between 2018 and 2019 and the remaining plots between 2020 and 2021. As soon as that has been done, then the NFI will start collecting data on new plots at a rate of 25% from 2020 onwards. The NFI also plans to continue with the remeasurement of all plots in the future as a continuous activity that will provide dynamic information of native forest strata.
- As for the generation of activity data, it is foreseen to finalize the spatially explicit change map for Bosque Palmar in 2019 and to begin with the regeneration/revegetation analyses of previously deforested areas since 2000.
- The use of remote sensors with a higher spatial resolution, such as Sentinel 2, as a complement to the Landsat sensors, which are currently used to detect coverage under a 30% threshold.
- Gather information on soil carbon on non-forest lands (post-deforestation) which are not included in the National Forest Inventory.

(x) Emissions from gases: Please provide any additional information that supplements the information contained in the Technical Assessment Report in relation to the inclusion of all gases that are significant sources of emissions. If not all of the gases were included, justify whether gases that are significant sources of emissions were not included due to lack of data and/or whether the omission overestimates emissions or underestimates removals. Provide also a plan to include all significant pools in future FREL/FRL submissions.

As mentioned above, the TA, when assessing the pools and gases included in Paraguay's FREL, noted that the omissions of pools and gases are probably conservative and identified areas for future technical improvement.

The nitrous oxide omission was justified as not being significant. The TA has agreed with this conclusion.

The action plan presented above in section B.1.1 (ix) under the NFMS is also relevant for assessing and analyzing the significance of emissions of gases that have been omitted.

(xi) IPCC guidance for FREL/FRL: Please indicate if the construction of the FREL/FRL (data, methodologies and estimates) was guided by 2003 GPGs or 2006 GLs.

The FREL construction was guided by the IPCC Good Practice Guidance on Land Use, Land-Use Change and Forestry (2003 GPGs).

For the estimation of activity data, a methodology corresponding to a level 3 of complexity described in the 2003 IPCC Good Practice Guidance document was used. The methodology uses geographically explicit land use and land-use change data.

For the emission factors’ estimation, Paraguay has implemented the National Forest Inventory within the framework of the country’s REDD+ efforts. This implies that the country has taken into consideration the IPCC guidelines for the design and implementation of the NFI.

The analyses performed to obtain the emission factors for both FREL and BUR’s National GHG Inventory for the LULUCF sector (2015) have also followed the 2003 GPG guidelines.

Additionally, and when pertinent, 2006 GLs default values have been used for the AFOLU Sector. For example, the dry matter ratio of 0.47 t C/t biomass has been used.

The data, methodologies and estimates that Paraguay is developing are aimed at enabling the country to use the most up-to-date IPCC guidelines in the future.

(xii) Issues related to applying IPCC guidance: Please mention any significant issues related to the application of IPCC GLs/GPGs as raised in the TA report. Include any significant issues that are material to the alignment with the methodologies of the IPCC GLs/GPGs that were raised in the TA report and whether significant issues were raised and resolved. If applicable, provide a plan to address and overcome issues raised in TA Report that were not material to the application of IPCC guidance and that couldn’t be resolved due to time and data restrictions.

During the FREL Technical Assessment in 2016 the AT did not raise any questions related to the application of the IPCC guidelines. Paraguay has used the 2003 Good Practice Guidance.

B.1.2. Additional criteria related to FREL/FRL

(xiii) Reference period for the FREL/FRL: Please indicate the reference period (number of years) applied for the construction of the FREL/FRL.
The reference period for the construction of the FREL corresponds to the years from 2000-2015, which totals 15 years.

This information is backed by the Landsat sensor satellite imagery acquisition date. The start of the period is around mid-2000 and the end of the period is around mid-2015. Details of the dates of the imagery used can be found in the FREL’s annex, including dates for intermediate cuts in 2005, 2011, 2013.

(xiv) If previous reference level submitted: Please indicate whether a previous reference level applying to the same area was submitted. If so, describe the difference between the emissions and removals used for the previous one and the current one. Describe any adjustments made to the current FREL/FRL compared to the previous one, if applicable.

Paraguay has only one FREL for the entire national territory, which considers only gross deforestation. It was first submitted on 4th January 2016 to the UNFCCC. After taking into consideration the concerns and observations raised by the Technical Assessment team, the country submitted a modified FREL on 9th May 2016.

The modified FREL did not change the scope of the first submission, but instead was aimed at improving consistency, transparency, accuracy and other concerns. The original and modified FREL cover the same areas (entire national territory, the reference period 2000-2015, pools included, GHGs).

(xv) Uncertainties: Please indicate whether the country has provided information on aggregated uncertainties of the emissions or removals estimate, taking into account national capabilities and circumstances, and if so, indicate the percentage of aggregate uncertainties and provide information on assumptions and sources. If applicable, indicate the process implemented to minimize systematic and random errors.

The construction of the FREL has made significant efforts to reduce the uncertainties associated with the activity data and emission factors used.

Activity Data

The calculation to assess the reliability of the Land Use Change Map for the period 2000-2005-2011 showed a total of 88.16% of overall accuracy considering the surface of each forest type per stratum. For the Land Use Change Map for the period 2011-2013-2015, the result was a total of 89.23% overall accuracy (considering the different forest types areas in hectares).

The calculations to determine the accuracy of both maps were performed using "stratified random sampling". This method consists of considering typical categories different from each other (strata) that have high homogeneity with respect to some characteristic. The purpose of this type of sampling is to ensure that all the strata of interest will be adequately represented in the sample. Each stratum works independently, although a simple random sampling can be applied to each of them separately.

Emission Factor

For the estimation of the uncertainty of the Emission Factor, the methodologies and procedures identified in the data processing document of the National Forest Inventory was used. This was done for each of the native forest strata and covers each of the components of the total living biomass pools (biomass below and above ground and understory vegetation biomass). The values obtained are presented in percentage in the following table.

<table>
<thead>
<tr>
<th>Native forest strata</th>
<th>Uncertainty % living trees biomass carbon</th>
<th>Uncertainty % understory vegetation biomass carbon</th>
<th>Uncertainty % Below ground biomass carbon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bosque Húmedo de la Región Oriental (BHRO)</td>
<td>7,27</td>
<td>16,74</td>
<td>5,97</td>
</tr>
<tr>
<td>Bosque Seco Chaqueño (BSCH)</td>
<td>6,19</td>
<td>12,38</td>
<td>6,38</td>
</tr>
<tr>
<td>Bosque Sub Húmedo del Cerrado (BSHC)</td>
<td>7,31</td>
<td>12,45</td>
<td>7,31</td>
</tr>
</tbody>
</table>
The National Forest Inventory, which provides the data for the estimation of emission factors, was designed and implemented taking into consideration potential sources of errors or biases in order to achieve high statistical, economic and time efficiency. The field data collection was carried out in 2014 and 2015 and includes a methodology for data collection (National Forest Inventory Field Manual).

Regarding aggregated uncertainties, the FREL did not make this estimate due to limitations in relation to activity data (Bosque Palmar without spatially explicit land cover for all periods) and the use of preliminary NFI results.

Since the country, after the completion of the FREL continued the field data collection and calculation of NFI results, it was planned to obtain these data and complement them with new map results.

(xvi) Please indicate whether different FREL/FRLs have been used for different funding sources or other purposes, and if so, list and describe them.

As already mentioned, Paraguay has only one FREL. The FREL has not been used to request and/or to access other sources of funding or for any other purpose. The Government of Paraguay does not intend to apply to other sources of financing other than the GCF pilot programme for which this funding proposal was prepared.

B.2. REDD-plu Results reporting

Please provide link to the BUR technical annex containing REDD+ results:


Please provide link to the UNFCCC Technical Analysis Report:

https://unfccc.int/sites/default/files/resource/tatr1_2019_PRY_advance_0.pdf

B.2.1. UNFCCC Technical Analysis

(i) Consistency of results with FREL/FRL: Please provide any additional information that supplements the information contained in the Technical Analysis Report in relation to the consistency of the reported results in the technical annex to the BUR with the FREL/FRL (including the inclusion of same pools, activities and gases).

"The equivalent carbon dioxide emissions (tons of CO₂e) from gross deforestation in Paraguay during the period 2015 - 2016 - 2017, were estimated using the same methodology used in the construction of the FREL, from the historical period 2000 – 2015" (REDD+ Technical Annex – BUR 2 – 2018).

The general description of the methodology used both for obtaining activity data and emissions factors can be found in section B1 of this proposal.

The results for the years 2015-2017 are for a total of 26,793,311.02 tCO₂e. The emissions and emission reductions for these years are detailed in the following table (Table 8) and compared with the annualized data of the emissions and the 2016 FREL. The results cover two years of analysis.

**Table 8**: Annualized emissions in tCO₂e, during the period 2000 - 2015, FREL and REDD+ results for the period 2015 - 2016 - 2017.
The following formula was used to calculate the emission reductions from gross deforestation:

**REDD+ Results period 2015-2016-2017, tCO₂ eq / year = (FREL period 2000 – 2015, tCO₂ eq /year) – (Gross emissions from deforestation for the period 2015-2016-2017, tCO₂ eq / year)**

Paraguay developed a methodology during the construction of the FREL that was consistently followed throughout the analysis of historical emissions (FREL) as well as for analyzing emission results during the reporting period.

The following figure shows a graphic representation of the emissions and the results corresponding to the total period of analysis.

**Figure 4**: FREL according to the average emissions per year (2000-2015), and emissions during the period 2015-2016-2017 for REDD+ results (tCO₂eq).

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**Consistency between the FREL 2016 and REDD+ results**

- The LULUCF experts that carried out the technical assessment noted that Paraguay ensured overall consistency between its FREL and its estimation of the results by:
- The use of the same methodology and data to generate activity data (AD) and using the same forest monitoring system.
- The use of consistent methodologies and data to generate Emissions Factors (EFs), using the same carbon stock for each disaggregated forest strata.
- The results reported include only emissions from gross deforestation (REDD+ activity).
- The same carbon pools have been included, which are: above ground biomass, below ground biomass, understory vegetation biomass.
- Only Carbon Dioxide (CO₂) emissions from the pools mentioned above are included.
- Covering the entire national territory.

**Consistency between the REDD+ results estimates and the BUR**

The results reported in the Technical Annex have identified the same inconsistencies that were reported in the FREL and its corresponding Technical Assessment during the 1st BUR (2015). This is due to Paraguay's decision to apply the same methodology to ensure consistency between the FREL and the REDD+ results. This therefore also generates inconsistencies with the 2nd BUR (2018), since they apply the same methodologies. The identified inconsistencies are described extensively in section B.1.1. of this proposal.

MADES, in coordination with INFONA, as the institutions responsible for the NFMS, is generating the necessary information in relation to activity data and emission factors to initiate the revision and/or adjustment process or alternatively the preparation of a new FREL that will allow inconsistencies to be eliminated in the National GHG Inventory in the LULUCF sector of the BUR.

**Forest definition**

Paraguay used the same forest definition for estimating the REDD+ results (2015-2017) and the FREL. This definition differs from the one used for the 2015 Global Forest Resources Assessment (UN FAO) and the Kyoto Protocol under the clean development mechanism. The forest definition has different thresholds for minimum forest cover and tree height based on the ecological conditions in the regions (minimum forest cover of 30 per cent and minimum tree height of 5 m for the eastern region, and 10 per cent and 3 m for the western region). However, the remote sensing analysis using medium-resolution satellital images are efficient for 20-40 per cent of minimum forest cover. The Assessment Team noted that this is an area for future technical improvement.

Paraguay has agreed with this explaining that the use of satellital images like the sensor Sentinel could be useful to monitor forest under 30 per cent of forest cover in the future.

**Availability of updated data.**

Paraguay, through the National Forestry Institute, with support from the Ministry of Environment and Sustainable Development, has continued with the implementation (data collection and processing and generation of results) of the National Forest Inventory after the construction of the 2016 FREL and its corresponding Technical Evaluation.

This process has generated new data that are considered final results, which will be used to improve the emission factors used in future FRELs.

However, to maintain consistency and comparability of 2015-2017 results with the 2016 FREL, the same emission factors have been used.

**(ii) Transparency of the data:** Please provide any additional information that supplements the information contained in the Technical Analysis Report in relation to the transparency of the data and information provided in the technical annex (i.e. whether information has been provided to provide an understanding of how UNFCCC guidance on results reporting has been addressed). Include information on significant issues raised in the Technical Analysis Report and whether these were raised and resolved. If applicable, provide a plan on how to address and overcome issues raised in the Technical Analysis Report, that were not material to the transparency of the data on results and that could not be resolved due to time and data restrictions.
The data used for the analysis of the results are available on the website:


More specifically, the following information and data related to the generation of results are available:

- Map of Forest Cover change 2015-2016.
- The carbon content of forest strata of the FREL and the REDD+ TA (electronic spreadsheet).
- Calculation of Results of the REDD+ Technical Annex (electronic spreadsheet).

On the same website, the data and information regarding the process of building the FREL are also available, and they are described and listed in section B.1.1. of this proposal.

Additionally, during the Technical Analysis of the results by the ICA, other information has been made available to the evaluators, such as: an electronic spreadsheet of the thematic evaluation containing error matrices, reference data for the accuracy evaluation, polygons of evaluation (shapefiles) and other data requested as the object-based classification segments (shapefiles).

To improve the transparency of the results, INFONA is in the process of adding the geographic data of the results in the GEO Web Portal, available at http://snmf.infona.gov.py:8091/portal/.

Additionally, the methodology was applied to define the activity data analyzing the changes in the forest cover for each year of the analysis period (2015-2016 and 2016-2017), unlike the FREL that carried out the analysis for periods of 5, 6, 2, and 2 years, which were subsequently annualized for the corresponding periods (2000-2005, 2005-2011, 2011-2013, 2013-2015).

One of the issues observed by the evaluation team was the difference between the deforested area in the 2015-2016 period and the 2016-2017 period. The possible causes of the difference have been discussed.

Paraguay’s response was that it has not been possible to identify with certainty the cause of this trend. However, it is possible that expectations generated by a Governmental Decree could influence the deforestation increase. In fact, in September 2017, the former administration enacted Decree 7702/17 under the modified Article 42 of Forestry Law, giving legal protection to deforestation in the forest reserves.

Shortly after the new government came into office, the new authorities of Paraguay repealed Decree 7702/17, ending the opportunity created to allow deforestation which was in clear disagreement with the environmental objectives of MADES and INFONA. This important decision is already generating the expected results. Preliminary data show that the level of deforestation had decreased, and is closer to the average of the 2015-2017 period.

Another consideration highlighted by the assessment team was the number of months of effective analysis during the results period. Paraguay clarified that, due to time and administrative constraints during the preparation of the analysis, the total months corresponding to the period of 2015-2016 were equal to 8 months, and the period of 2016-2017 corresponds to approximately 13 months. This means a total of 21 months of analysis were included. This is due to the acquisition date of the Landsat satellite images used.

Furthermore, Paraguay clarified that deforestation that was not detected or counted in the first period (2015-2016) is accounted in the second period (2016-2017), and those that are not counted in the second period will be accounted for in a subsequent analysis for 2017-2018.

Aggregated uncertainties
One of the limitations discussed during the Technical Analysis process was that Paraguay’s REDD+ Technical Annex (version submitted in 2018) did not include an estimate of the error propagation.

More specifically, the evaluators consulted if the calculation had been made and asked Paraguay to perform the analysis of global uncertainties for the emission factors by the activity data for the period of results as well as for the emissions reductions results. The purpose of the request is to improve the transparency of the results.

Paraguay responded to the request during the assessment process resulting in the following explanation provided by the LULUCF experts:
“The LULUCF experts also noted that the technical annex did not include aggregate uncertainties of emissions over the results period, or aggregate uncertainties for the emission reductions. In response, Paraguay calculated the aggregate uncertainty, propagating the error of AD and EFs at 23 per cent for the emission estimates for 2015–2017. The LULUCF experts commend Paraguay for calculating the aggregate uncertainty of the emission estimates for 2015–2017”.

(iii) Completeness of the data: Please provide any additional information that supplements the information contained in the Technical Analysis Report in relation to the completeness of the data and information provided in the technical annex (i.e. whether information has been provided that allows for the reconstruction of the results). Include information on significant issues raised in the Technical Analysis Report and whether these were raised and resolved. If applicable, provide a plan on how to address and overcome issues raised in the Technical Analysis Report, that were not material to the completeness of the data on results and that could not be resolved due to time and data restrictions.

During the Technical Analysis process, in addition to the information contained in the document of the Technical Annex of the BUR 2, all of the information necessary for the reconstruction of the results was made available.

This information has been described in the previous section (ii) Transparency of the data.

(iv) Consistency of the data: Please provide any additional information that supplements the information contained in the Technical Analysis Report in relation to the consistency of the data and information provided in the technical annex (i.e. data and methodologies were applied consistently over the results time series). Include information on significant issues raised in the Technical Analysis Report and whether these were raised and resolved. If applicable, provide a plan on how to address and overcome issues raised in the Technical Analysis Report, that were not material to the consistency of the data on results and that could not be resolved due to time and data restrictions.

The construction of the results for the period 2015-2017 was obtained by applying the data and methodologies defined in a consistent manner for the entire time series. The emission factors used are the same for the period of results and for the construction of the 2016 FREL.

One of the limitations of the activity data is that the country does not have a spatially explicit forest cover change map for the Bosque Palmar strata (palms) for the entire time series. As explained in section B.1.1, the country is in the process of generating a multi-temporal series of annual changes for this stratum. This is part of the areas of future improvements under the step-wise-approach described in the FREL.

Regarding the consistency of the scope of the analysis of the activity data, the Technical Analysis team made an observation on the definition of forests that includes regenerated forest areas. More specifically, views on regenerated forests were exchanged on previously deforested areas in the period of analysis of the FREL and that could result in a double counting in the results because they were accounted for as new deforestations in the results period.

Paraguay’s response has been not to account for changes that occur outside the forest cover, since the changes are analyzed against the forest layer corresponding to the previous year. As mentioned above, the analysis of the area classified as non-stable forest or change during the FREL will be analyzed in the near future to determine the forest dynamics that allow establishing the parameters for inclusion in the FREL. Additionally, it is highlighted that reforestation areas (which can be harvested and subsequently replanted) are not included in the definition of forests.

Solving this limitation is included as part of the improvement plan objectives presented earlier in this proposal.

Also, Paraguay has clarified that since the country does not have a definition and methodology to assess forest degradation, it cannot be analyzed if the changes occur in an area of forest cover that was previously degraded.

The technical report in regard to transparency, consistency, completeness and accuracy mentioned:

“The LULUCF experts concluded that Paraguay provided the necessary information to allow for the reconstruction of the results of the implementation of the activity reducing emissions from deforestation. The data and information provided in the technical annex are considered to be transparent, consistent, complete and accurate to the extent possible.”
(v) Accuracy of the data: Please provide any additional information that supplements the information contained in the Technical Analysis Report in relation to the accuracy of the data and information provided in the technical annex (i.e. whether it neither over- nor under-estimates emissions and/or removals). Include information on significant issues raised in the Technical Analysis Report and whether these were raised and resolved. If applicable, provide a plan on how to address and overcome issues raised in the Technical Analysis Report, that were not material to the accuracy of the data on results and that could not be resolved due to time and data restrictions.

As explained above, one of the observations during the Technical Analysis related to the possible double counting of non-forest areas or changes that could meet the forest definition and subsequently be deforested again. As mentioned before, a multi-year analysis, to be carried out outside the forest area, will be used to address this issue.

The technical assessment report noted that Paraguay estimation of results of the implementation of the activity reducing emissions from deforestation in the national area was undertaken using a transparent and consistent approach.

The results of the 2015-2017 analysis assume that deforestation takes place in native forest and that instant oxidations occurs; this is the same approach followed for the FREL. Forest degradation or the subsequent land use is not considered.

Based on this, “the LULUCF experts noted that, if the carbon densities in these areas had been reduced (e.g. due to forest fires) or increased (e.g. due to natural regeneration or restoration) before a deforestation event, then emissions from deforestation could have been either overestimated or underestimated.”

Paraguay’s response was that enhancement of forest carbon stocks after 2000 was not included in the mask to track deforestation and that the intention is to include other REDD+ activities (degradation and enhancement of forest carbon stocks) in its future submissions. The experts also noted that not considering the carbon content of the land in its subsequent land use may lead to an overestimation of the emissions from deforestation and its correspondent reduction.

Paraguay’s response was that including additional REDD+ activities and the intention to include removals from the subsequent land use in the analysis are part of the stepwise approach.

Regarding the emission factors, it is highlighted that the National Forestry Inventory has provided final results that have improved the estimation of the emission factors and the analysis of their associated uncertainty. However, due to the need to maintain consistency between the FREL and the REDD+ results, it was decided not to use them.

(vi) Indicate the number of years that took place between the last year of the FREL/FRL period, and the year corresponding to the results being proposed for payments:

The results obtained correspond to the period immediately following the FREL, which considered the period between 2000-2015. The results correspond to the period between 2015-2017.

The methodology used guarantees that the deforestation estimated in 2015 is discriminated and appropriately attributed to the last period of the FREL (2013-2015) and the first period of the results (2015-2016).

B.2.2. Additional criteria related to the achieved results

(vii) Uncertainties: Explain whether the country has provided information on aggregate uncertainties of the results, taking into account national capabilities and circumstances. Include the percentage of aggregate uncertainties and provide information on assumptions and sources. If applicable, indicate the process implemented to minimize systematic and random errors.

The original document of the REDD+ results presented in 2018 did not estimate aggregate uncertainties.

During the Technical Analysis, the evaluators requested that Paraguay carry out the analysis of global uncertainties for the emission factors by activity data for the period of results and for the results of the reduction of emissions.
In response, Paraguay calculated the aggregate uncertainty, propagating the error of AD and EFs at 23 per cent for the emission estimates for 2015–2017. The LULUCF experts commended Paraguay for calculating the aggregate uncertainty of the emission estimates for 2015–2017.

Paraguay has reported the uncertainties associated with the emission factors in both the FREL (see section B1 of this proposal) and for the activity data for the reporting period 2015-2017.

In addition, Paraguay presented the estimates of emission factors resulting from the final results of the National Forest Inventory. However, these have not been used to maintain consistency between the FREL and the results, as explained above.

**(viii) Preventing double payments:**

- Provide information on payments that have been or are expected to be received from other sources of funding for results recognized by the country for the same area for the same period, for which the country is applying for payments from the GCF.
- Include relevant information regarding the payments paid or expected to be paid, including the year(s), results volume in tCO2e, quantities for which payments were received/are expected to be received, and entity/entities paying for the results as well as any type of agreement involved.
- Provide sufficient assurances that the results that have been paid or are expected to be paid for by other sources (or are under any type of analogous agreement) been excluded from the volume offered to the GCF.
- Provide a description of measures to ensure that the results paid by the GCF will not be transferred, offered for future payment or otherwise used (for example for offsets) and information on how the results proposed for payment by the GCF will be treated or used.
- Provide information on how different financing contributed to the achieved results.

**Information on payments paid or expected to be paid including other sources of financing**

The Government of Paraguay has not received any payment for the period from 2015 to 2017. In addition, no request has been made to other potential sources of payments, nor are there pending processes for periods before or after 2015-2017.

Likewise, the Government of Paraguay does not have agreements of any kind that commits REDD+ emissions reductions achieved by the country.

**Treatment of the results paid by the GCF**

The Government of Paraguay is in the process of establishing a national registry of mitigation actions that will include emission reductions from REDD+ results. A provisional version of the registry is available online at the following link:

http://dncc.mades.gov.py/registro-de-reduccion-de-emisiones-en-paraguay

The final version of the registry is expected to be available before March 2020. This registry will be published and made accessible on the MADES website and will contain all the pertinent information that allows transparency and traceability of emission reductions and payments received based on the 2016 FREL.

The volume of results presented to the GCF have been published in the "Lima REDD+ Information Hub" of the REDD+ Web Platform of the Convention in accordance with Decision 9/CP.19.

In order to eliminate any possibility of double payments, there will be no transactions except with the GCF until a final registry is established and made publicly available.

**Financing that contributes to the results achieved**

The Government of Paraguay has not received any payment for REDD+ results. However, the country has implemented projects and actions have been planned that contribute to generating emission reductions in the LULUCF and Agriculture sector. These actions have been carried out during the last decade and have indirectly contributed to the country's efforts in relation to REDD+.

Likewise, the Government of Paraguay has received different types of international technical cooperation for the generation of information, data and methodologies that have contributed to the preparation of the country for REDD+ (Readiness Phase). These include the UN-REDD National Programme, which advanced in the strengthening of national REDD+ capacities through work for the construction of elements of the Warsaw
Framework, and the Forests for Sustainable Growth Project of the FCPF that has finalized the ENBCS (National Strategy of Forests for Sustainable Growth) (REDD+ Strategy) and the consolidation of other REDD+ elements.

Other specific support received by MADES and INFONA corresponds to the technical cooperation of the Government of Japan (Forest Preservation) that contributed to the generation of allometric equations, support from the NGO SilvaCarbon to INFONA for forest degradation analysis, and technical cooperation and funds for the preparation of the Biennial Update Reports and National Communications.

These multilateral or bilateral cooperation projects do not correspond to payments for REDD+ results.

The following table presents mitigation actions that were included in the Second Biennial Updated Report of Paraguay (2018), and could have indirectly contributed to the results of REDD+.

Table 9: Paraguay’s Mitigation Actions in the AFOLU Sector

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>AFOLU</th>
<th>IMPLEMENTATION PERIOD</th>
<th>GOVERNMENT CO-FINANCING</th>
<th>REDUCTION OF CO2 Eq</th>
<th>FUNDING SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>BILLIONS USD</td>
<td>(%)</td>
<td>BILLIONS USD</td>
<td></td>
</tr>
<tr>
<td>Project Green Commodities (Sustainable Landscape Production) - Eastern Region</td>
<td>2014-2019</td>
<td>29.3</td>
<td>49.4</td>
<td>14.5</td>
<td>15.3</td>
</tr>
<tr>
<td>Project Deforestation reduction in sustainable production and beef demand - Western Region</td>
<td>2017-2021</td>
<td>8.3</td>
<td>37.3</td>
<td>NE</td>
<td>5</td>
</tr>
<tr>
<td>PROEZA: Poverty, Reformation, Energy and Climate Change, Component 1 “Planting Future: vulnerable households” from the year 2012</td>
<td>2018-2022</td>
<td>90.3</td>
<td>72.2</td>
<td>85.2</td>
<td>7.9</td>
</tr>
<tr>
<td>PROMESA: Programme for Incentives for Payment for Environmental Services to reduce deforestation in the Dry Chaco Forest</td>
<td>2016-2020</td>
<td>4.4</td>
<td>10.2</td>
<td>0.45</td>
<td>5.7</td>
</tr>
<tr>
<td>Asunción Green City of the Americas – Sustainable routes, Transport integration, Urban waste, and green infrastructure to achieve urban planning for a sustainable and resilient city</td>
<td>2017-2022</td>
<td>7.5</td>
<td>NE</td>
<td>NE</td>
<td>1.2</td>
</tr>
<tr>
<td>Inclusive Value Chains in Agriculture</td>
<td>2013-2018</td>
<td>7.5</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Project Green and Inclusive Economy to promote sustainable production and poverty alleviation (PEI)</td>
<td>2014-2018</td>
<td>1.7</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Project Tucumán Paraguay (TRP)</td>
<td>2013-2018</td>
<td>28.5</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Project for Sustainable Rural Development (PRODERS)</td>
<td>2014-2020</td>
<td>146.7</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Paraguay forest conservation project (Project ID 953)</td>
<td>2010-2040</td>
<td>7.5</td>
<td>NE</td>
<td>NE</td>
<td>0.8</td>
</tr>
<tr>
<td>Shared resources, joint solutions - Recursos compartidos, soluciones conjuntas (PACHA)</td>
<td>2016-2020</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>

| TOTAL AFOLU | 348 | 35.1 |

*Corresponds to funding different that those coming from the Government of Paraguay. Additional information gathered from other compilation.


There are several incentives already underway by means of Law 422/73. These include the exemption of real estate taxes for plantations and forests in lands that have been designated as forests, the offset of income taxes when funds are invested in forest plantations and exemptions from taxes on equipment needed for afforestation and reforestation activities.

Note that these projects do not have specific objectives of payments for REDD+ results and have not used the FREL as a framework for reducing emissions.
REDD+ Projects under Voluntary Schemes in Paraguay

In Paraguay, there are two projects developed for the voluntary carbon market that include REDD+ activities of reducing deforestation and forest degradation. These projects have international certifications of the Voluntary Carbon Standard.

The first project was developed in the Department of Alto Paraguay in the Dry Chaco and has an implementation period from 2011 to 2030. The project estimated reductions or removals of emissions of 198,238.00 tCO2e for 20 years of the project.

The second project was developed in the Atlantic Forest (Bosque Húmedo de la Región Oriental) and covers the period from 2010-2011 to 2029-2030, with an estimated reduction or removals of emissions of 25,306.00 tCO2e for 20 years of the project.

For the period of years corresponding to the period of results of the REDD+ Technical Annex of Paraguay 2015-2017, the two projects have estimated emissions or removals equal to 30,444 metric tons of CO2eq (corresponds to 2 years).

Table 10: Estimated Avoided Emissions – voluntary projects

<table>
<thead>
<tr>
<th>Dry Chaco 1</th>
<th>Atlantic Forest 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period</td>
<td>tn CO2 eq / year</td>
</tr>
<tr>
<td>2016</td>
<td>13,077</td>
</tr>
<tr>
<td>2017</td>
<td>13,419</td>
</tr>
<tr>
<td>Sub total (2 year)</td>
<td>26,496</td>
</tr>
<tr>
<td>Total</td>
<td>30,444 metric tons of CO2 eq</td>
</tr>
</tbody>
</table>

Source: Compilation with data of the projects available at [https://www.vcsprojectdatabase.org/#/project_details/953](https://www.vcsprojectdatabase.org/#/project_details/953) and [https://www.vcsprojectdatabase.org/#/project_details/1403](https://www.vcsprojectdatabase.org/#/project_details/1403)

These projects were developed by the non-governmental organization Guyra Paraguay under a private agreement with an international donor (World Land Trust). The projects are scheduled to be evaluated and verified during 2019 to assess for reductions or removals that have occurred so far.

Estimates of avoided emissions (removals or reductions) for the entire period of both projects (20 years) are equivalent to 0.83% of the 26.79 million tons of CO2 eq of the REDD+ result. Considering only the estimates foreseen for the period 2015-2017, the reductions or emissions correspond to 0.114%.

The methodologies used by these projects for their estimates are not the same and they have not used Paraguay’s FREL or its methodologies, as they were developed prior to the construction of the FREL of Paraguay. Therefore they are not comparable (they do not cover the same REDD+ activities, pools and they do not use the same activity data and emission factors).

IMADES (formerly SEAM) had no direct involvement in the development of the projects, but has knowledge of them, and the project results were reported as mitigation actions in the BUR 2 (2018).

These projects would not be entitled to claim any compensation because they have already benefited from a private transaction.

Additionally, the equivalent of the potential removals or emission reductions of these projects will be discounted and set aside from those offered to the Green Climate Fund to avoid any type of current or future double counting.

This can be considered as an interim measure while the country implements its national registry mentioned above.

(ix) Tracking emissions reductions: Indicate whether the achieved results are included in a registry or similar system that tracks emissions reductions and corresponding payments, and ensures that there is no past or future double payment or use of such results, including information to identify the area where the results were achieved, the entity eligible to receive payment, year(s) generated, source(s) of payments received, and identifying code, where possible. Provide the link or information where to find the registry or similar system.
The government of Paraguay has not received any payment or funds from any source related to results under a REDD+ scheme (more details are provided in section B2.2 (ii) above).

MADES, as the national authority on climate change and REDD+ focal point under the UNFCCC, has records of the different projects implemented at the national level that contribute to the mitigation of climate change, including for REDD+ as well as for other sectors. The descriptions of these projects are included in the Climate Change Communications and Biennial Update Reports.

Additionally, the country has information on REDD+ projects that have been carried out with private transactions on a voluntary basis. These projects have not used comparable methodologies as those used to inform this proposal (data for estimation, baselines, emissions, reductions due to deforestation and/or the degradation of forests), and were not developed under Paraguay’s FREL or included in the results reported in the REDD+ Technical Annex at the national level. More information in the section REDD+ Projects under Voluntary Schemes in Paraguay can be found in the previous section.

The Government of Paraguay, through MADES and the National Commission on Climate Change, is in the process of facilitating dialogue to design and implement a registry for mitigation actions, whether national actions or results of specific support for all sectors. This discussion also occurs in a regional context, as Paraguay is developing information at multiple scales to define the most efficient and effective way to implement the registry.

While this process takes place, Paraguay has published a provisional version of the REDD+ registry, which is available online. The final version of the REDD+ registry is expected to be available before March 2020. This registry will be published and made accessible on the MADES website and will contain all the pertinent information that allows transparency and traceability of emission reductions and payments received based on the 2016 FREL.

The volume of results presented to the GCF have been published in the "Lima REDD+ Information Hub" of the REDD+ Web Platform of the Convention in accordance with Decision 9/CP.19.

In order to eliminate any possibility of double payments, there will be no transactions except with the GCF until a final registry is established and made publicly available.

Only the results of emission reductions for the period 2015-2017 (23,000,000 tnCO2 eq) will be considered in this proposal. The additional reductions that were not committed will not be used until the national mitigation registry in the MADES is finalized.

Considering that this proposal to receive payments under the “pilot programme for REDD+ results-based payments” of the GCF is the first one Paraguay is submitting, there is certainty that none of these reductions of emissions will be considered for any other sources.

Likewise, it can be emphasized that the information relating to the FREL, and the payments received for results from it, will be submitted to the UNFCCC, by the corresponding mechanism, so that it is published in the "Lima REDD+ Information Hub" of the REDD+ Web Platform of the Convention, in accordance with Decision 9/CP.19.

C. Non-carbon elements

Please provide link to the summary on information on safeguards: (being uploaded to the UNFCCC)
https://redd.unfccc.int/files/paraguay_resumen_de_informacion_salvaguardas.pdf

C.1. Cancun safeguards

C.1.1. Compliance with Cancun safeguards. Please provide any additional information that supplements the information included in the “summary of information on safeguards” that allows understanding how each of the safeguards below was addressed and respected in the full period during which results were generated in a way that ensures transparency, consistency, comprehensiveness and effectiveness:

(i) That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements.

Comments:

The complementarity and/or compatibility of REDD+ actions is defined within the framework of national and international policies, laws, decrees and commitments related to REDD+ in Paraguay, which include, among others: the Constitution of the Republic of Paraguay, the National Development Plan 2030 that frames the
National Strategy of Forests for Sustainable Growth (ENBCS), the National Contributions of Paraguay, and other national laws and international agreements related to the topic.

The implementation of policies and measures (PAMs) that contribute to the reduction of deforestation are based on the development processes proposed by the National Development Plan 2030, in coherence with the National Environmental Policy, the National Forestry Policy and the National Energy Policy of the country. The ENBCS is a strategy that builds on the country's development processes and has a concrete approach to sustainable development, where natural capital and forest resources are an important part of the country's long-term development. ENBCS PAMs are consistent with the National Climate Change Plan and its National Mitigation Strategy, which is focused on mainstreaming actions related to mitigating the adverse effects of climate change. In addition, the ENBCS and other related actions that seek to avoid or reduce deforestation are complementary and/or consistent with relevant international conventions and agreements.

During the 2015-2017 results period of this proposal, the following activities, among others, were carried out:

- Analysis of the necessary legal aspects to implement REDD+ at the national level was carried out.
- From 2015 onwards, the development process of the National Climate Change Mitigation Strategy was initiated.
- The development of the ENBCS was aligned with the relevant current legal framework for the implementation of REDD+, based on participatory processes and considering the relevant legal framework elements, including international instruments and conventions.

The ENBCS contributes to the country's sustainable development goals, as defined in the National Development Plan, as well as to climate change mitigation and biodiversity conservation goals and objectives, including those defined in the National Biodiversity Strategy and Action Plan, among others. The First Summary of Information on Addressing and Respecting REDD+ Safeguards in Paraguay for the period 2011-2018 includes detailed information that demonstrates the complementarity and/or consistency of REDD+ actions in Paraguay throughout the design of the ENBCS and the implementation of other actions that seek to avoid or reduce deforestation, with national forest programmes and international conventions and agreements on the subject. The main elements are summarized below:

- Two key pillars of the National Development Plan 2030 are poverty reduction and social development and inclusive economic growth. These are directly related to the objectives of REDD+ in terms of poverty reduction and reduction of deforestation; contributions to livelihoods; increased national income from the sale of environmental services; and increased efficiency in agricultural production systems.
- The National Forest Policy was presented in 2009 with the objective of achieving sustainable economic growth in Paraguay by increasing the economic, social and environmental benefits of goods and services from the country's forests.
- REDD+ is consistent with the Law 422/73 "Forestry Law".
- Law 2524/04 "on the prohibition of activities of transformation and conversion of areas with forest cover in the Eastern Region", better known as the "Zero Deforestation Law", is implemented in the Eastern Region of the country, and establishes a moratorium on the conversion of forests to other uses (agriculture, timber production or human settlements). The moratorium was successively extended in 2006 (by Law 3139), 2008 (by Law 3663) and 2013 (by Law 5045), and 2018 (by Law 5266). This latest extension has a period of 2 years.
- Law 3001/06 “Valuation and Compensation of Environmental Services”, which has the objective to promote the conservation, protection, recovery and sustainable development of the country's biological diversity and natural resources.

The ENBCS and the implementation of PAMs to reduce deforestation are consistent with relevant international commitments and agreements, for example on the United Nations Declaration on the Rights of Indigenous Peoples and the American Declaration on the Rights of Indigenous Peoples, in addition to the following:

- Law 251/93 approving the United Nations Framework Convention on Climate Change.
- Law 970/96 approving the United Nations Convention to Combat Desertification in those countries experiencing serious drought and/or desertification.
- Law 253/93 approving the Convention on Biological Diversity (Articles 1, 2, 3, 7, 8).
- Law 2309/03 approving the Cartagena Protocol on Biosafety.
• **Law 583/76** approving and ratifying the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

• **Law 05/92** approving the *International Covenant on Civil and Political Rights* (ICCPR).

• Transparent and effective national forest governance structures, taking into account national legislation and sovereignty.

**Comments:**

Paraguay is preparing for and promoting the implementation of REDD+ under the leadership of the Ministry of Environment and Sustainable Development (MADES), and with the collaboration of the Technical Secretariat for Economic and Social Development Planning (STP), the National Forestry Institute (INFONA), the Paraguayan Institute of Indigenous Peoples (INDI), the Federation for the Self-Determination of Indigenous Peoples (FAPI), and with the support of the UN-REDD Programme and the Forest Carbon Cooperative Fund - Project 92546 "Forests for Sustainable Growth". An important advance in this work has been the development of the National Strategy of Forests for Sustainable Growth (ENBCS), through a process that involved various institutions and actors, to ensure a coordinated and effective planning and implementation of REDD+ policies and measures. The cross-cutting objective of ENBCS is to strengthen institutional capacities to articulate and coordinate forest governance.

In the context of REDD+ in Paraguay, there is a commitment an effective forest governance framework, that takes into account the relevant regulatory framework and national sovereignty. There is also a commitment to accountability and transparency, and to making information related to REDD+ available to the public, facilitating public access to information. There is also a commitment to making grievance redress mechanisms available during the design and implementation of the ENBCS, and for purposes of REDD+ benefits sharing.

The *First Summary of Information on Addressing and Respecting REDD+ Safeguards in Paraguay for the period 2011-2018* includes detailed information on the legal framework in Paraguay relevant for promoting transparent and effective national forest governance structures, taking into account national legislation and sovereignty. Of particular relevance is the Law 5282/14 on Free Citizen Access to Public Information and Government Transparency, which supports the development of mechanisms that can facilitate the participation of citizens in REDD+ processes. Under this Law, any citizen can request information and data in various formats (including text, maps, digital cartography, reports, budgets, etc.), from different public institutions, which then have specific deadlines for responding to requests.

During the outcome period for this proposal (2015-2017), the activities described as follows were carried out, in accordance with an approach for effective and transparent forest governance.

MADES, the REDD+ focal point for the UNFCCC, has implemented actions as an environmental authority with respect for the national laws under its jurisdiction, contributing to the actions of other institutions such as INFONA. INFONA, as the country’s forest authority and the primary organization responsible for the implementation of the National Forest Policy, has actively participated in the development of REDD+ PAMs. Both INFONA and MADES have coordinated actions with the District Attorney in charge of investigations and criminal prosecutions of environmental and forest law violations to achieve effective sanctions that strengthen law enforcement. This work also involves coordination with the Judicial Branch.

In this period, the process of establishing a land tenure formalization mechanism was initiated. Several actions were also implemented focusing on institutional strengthening, aimed at better forest control and monitoring, forest and environmental law reforms, and capacity building.

Documents related to the REDD+ in Paraguay and the ENBCS are available online to the general public.

Several government institutions, including MADES, have made efforts to have information digitized and made publicly available. There are a number of existing mechanisms aimed at sharing information in a transparent manner.

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3 The main public sources are: the Executive Branch, Legislative Branch, Judicial Branch, Armed Forces, Ombudsman's Office, State Financial Entities, National Universities, Departmental and Municipal Governments, and Mixed and Binational Commissions. They must set up offices of Access to Public Information and must keep the information generated updated and, within them, the possible mechanisms for citizen participation.

and accessible manner which can support REDD+ implementation, making it easier for the public to make complaints, claims and suggestions. For example, there are platforms available for requesting access to information, including the Unified Public Information Portal, which has 363 member institutions. As an example, 22 requests for information on “forests, deforestation or REDD+” were received and responded to through this portal between 2015 and 2017. Overall, MADES received 34 requests in 2016 (14 women, 19 men and 1 not declared) and 83 requests in 2017 (40 women, 38 men and 1 not declared). These requests included clarifications on the legal framework and procedures, follow-up to procedures, environmental impact studies/assessments, and climate change reports, among others.

According to records, in the period 2015-2018, the Department of Integrated Environmental Auditing carried out 183 auditing and intervention procedures on issues related to deforestation, land-use changes, selective tree extraction and others in Paraguay. These were carried out in response to citizen complaints; requests for support from institutions and tax offices; and ex officio checks. These responses are all in the context of current environmental legislation of which MADES is the implementing or contributing authority. All of the information on the interventions was then sent to the Legal Advisory Directorate of MADES for them to take the corresponding legal measures; in some cases it was also sent to the Public Prosecutor's Office.

INFONA also has mechanisms to report on corruption and forest-related issues. There is an option for anonymous reporting.

A diagnostic report and a study were carried out on the development of a grievance redress mechanism associated with REDD+, which would address stakeholder complaints and concerns regarding the ENBCS and all REDD+ related issues in the country. This mechanism will be validated at a national level and then implemented.

During the implementation of the UN-REDD National Joint Programme (2011-2016) an e-mail account (onccseampy@gmail.com) was set up to receive, review and process concerns and recommendations, respond to consultations and incorporate them into REDD+ readiness processes.

At the REDD+ governance level in Paraguay, beyond the national forest governance institutions mentioned above, in the UN-REDD National Programme a “National Technical Team” comprising members of SEAM (now MADES), INFONA, FAPI, the United Nations Environment Programme (UN Environment), the United Nations Development Programme (UNDP) and the Food and Agriculture Organization (FAO) was formed, and met regularly to review implementation of the Programme, and technical aspects related to REDD+ readiness. Within the framework of the Forests for Sustainable Growth (BCS) Project, which involves MADES, INDI and UNDP, a Technical Committee was formed, composed of 12 public institutions working in the area of sustainable development. This Committee is organized in working groups focused on the activities of the project.

The National REDD+ Focal Point of Paraguay requested that the Secretary of the National Commission on Climate Change set up a REDD+ Roundtable, composed of members of this Committee as well as other actors, including indigenous peoples’ representatives, civil society associations, academia and the private sector.

Respect for the knowledge and rights of indigenous peoples and members of local communities is a guiding principle that was applied throughout the ENBCS preparation process, and during the implementation of a series of programmes, projects and incentives to reduce deforestation associated with REDD+. These same principles are framed within Paraguay’s national legal framework, in addition to international commitments on the topic, and in recognition that the United Nations General Assembly adopted the United Nations Declaration on the Rights of Indigenous Peoples.

Comments:

Respect for the knowledge and rights of indigenous peoples and local communities is a guiding principle that was applied throughout the ENBCS preparation process, and during the implementation of a series of programmes, projects and incentives to reduce deforestation associated with REDD+. These same principles are framed within Paraguay’s national legal framework, in addition to international commitments on the topic, and in recognition that the United Nations General Assembly adopted the United Nations Declaration on the Rights of Indigenous Peoples.

Paraguay’s National Census of Indigenous Peoples and Households of 2012 identifies 493 indigenous communities, with 19 different indigenous groups, grouped into five linguistic families. According to the Census, indigenous peoples live in 13 departments of the country, with a total population of 117,150 people.

Figure 5: Indigenous communities in Paraguay
The recognition and protection of ancestral knowledge and the rights of indigenous peoples and local communities is framed in Chapter V of the Constitution of the Republic of Paraguay, which recognizes the existence of indigenous peoples and defines them as cultural groups that existed prior to the formation of the Paraguayan State. Indigenous peoples have the right to collective ownership of land, in sufficient extent and quality for the conservation and development of their particular forms of life. Within the framework of REDD+ safeguards, local communities are defined as those who are dependent on forests and small farmers (campesinos).

There are several other elements of the Paraguayan legal framework which also strongly emphasize the rights of indigenous peoples and local communities, recognition of their heritage, traditions, and rights for the improvement of their economic conditions. The First Summary of Information on Addressing and Respecting REDD+ Safeguards in Paraguay for the period 2011-2018 includes detailed information on the relevant legal framework, some elements of which are summarized below:

- Law 904/81 Indigenous Communities Statute.
- Law 2128/03 ratifies the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD).
- ILO Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries, which is recognized in Law 234/93.

In addition, Decree 1039/18 approved the "Protocol for the Process of Consultation and Free, Prior and Informed Consent of Indigenous Peoples Living in Paraguay". This Decree is the result of nine years of consultations and preparation between various government agencies and representatives of indigenous organizations. It became an official regulation in 2018. This protocol is based on Chapter V of the Indigenous Peoples' Constitution, mentioned above, as well as Convention No. 169, Article 6, which stipulates that the

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5 In Paraguay's 2012 Indigenous Peoples' Census, an indigenous community was defined as a group or set of groups of indigenous families settled in a specific territorial area, owned or not, which is identified with one or more leaders of its own. The community should not only be interpreted in geographical terms, but also in social terms, which means that groups of indigenous people living in estancias, urban or rural neighbourhoods, among others, should be identified.
Government shall consult the peoples concerned, through appropriate procedures, whenever susceptible legislative or administrative measures are envisaged that may directly affect them. The United Nations Declaration on the Rights of Indigenous Peoples, the American Convention on Human Rights and other international instruments ratified by Paraguay also form the fundamental basis of this protocol, which authorizes the Paraguayan Indigenous Institute to issue relevant regulations for the effective implementation of the provision, with the cooperation of indigenous peoples.  

During the 2015-2017 period, REDD+ preparation included indigenous organizations as key partners in decision-making and inter-institutional work, first with FAPI as part of the UN-REDD Programme, and with INDI as part of the BCS project, as well as extensive consultation processes with indigenous peoples. A number of analyses were developed during this time to promote the involvement of indigenous peoples in REDD+, including: i) the identification of "principles, operational guidelines and work plan to Promote the Effective Participation of Indigenous Peoples in future REDD+ projects or programmes"; ii) a study on the cultural benefits associated with sites considered sacred by different communities, as well as evaluation and mapping of non-carbon benefits of REDD+ associated with the livelihoods of indigenous peoples and local communities (see also Section C.2.6).

There have been several efforts to ensure the involvement of indigenous actors in REDD+ and to consider their visions and needs. With support from the FAPI, capacities were developed and indigenous organizations and actors were involved in the process of developing the ENBCS with the objective of incorporating their visions and needs. FAPI developed its own information system on indigenous lands and territories, which is now online.

Support has been provided in processes of land titling and recognition of collective property. Within the framework of Law 3001/06 on the Valuation and Compensation of Environmental Services in Paraguay, progress was made on the certification of forests of several indigenous communities through a system of valuation of environmental services in Paraguay.

In addition, small farmer (campesino) communities have been identified as important stakeholders for REDD+: ENBCS development has included several specific spaces for dialogue and discussion with this stakeholder group.

(iv) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of 1/CP.16.

Comments:

Full and effective participation in the context of REDD+ in Paraguay is understood as the participation of all relevant stakeholders who can influence or be affected by REDD+, in both the design and implementation of the ENBCS and specific PAMs. The Paraguayan State has the mission to ensure the rights of participation of women, indigenous peoples and youth. The country's legal framework guarantees equal opportunities to access the benefits of nature. Also, indigenous peoples have the right to be consulted on any project that may affect their ancestral lands, territories, natural resources and livelihoods. This includes the rights of affected indigenous peoples to give, or not, their free, prior and informed consent (FPIC). In this regard, Decree 1039/18 approving the "Protocol for the Process of Consultation and Free, Prior and Informed Consent with Indigenous Peoples Living in Paraguay" is applied (see Section ii). Consultation is an obligation of the Paraguayan State, which also recognizes the right of individuals to receive truthful, responsible and impartial information.

The Constitution of the Republic of Paraguay includes the right "to the defense of diffuse interests" (Article 38), which establishes that every person has the right to demand measures for the defense of the environment, the integrity of the habitat, public health and the national cultural heritage from the public authorities. With the ratification of Convention No. 169 of the International Labour Organization concerning Indigenous and Tribal Peoples in Independent Countries, by Law 234/93, the Paraguayan State reinforces this constitutional principle by adhering to the provision of the Convention which provides that "governments shall consult the peoples concerned, through appropriate procedures and in particular through their representative institutions, whenever legislative or administrative measures likely to affect them are envisaged".

The cross-cutting gender approach of the ENBCS is aligned with the guidelines of the National Development Plan 2030, which seeks to achieve gender equity as well as equitable development. The ENBCS seeks to
promote access in equity to services such as specialized education on the forest (including knowledge of legislation, good environmental and energy practices), land and financial or investment credit.

The First Summary of Information on Addressing and Respecting REDD+ Safeguards in Paraguay for the period 2011-2018 includes detailed information on the key elements of the country's legal framework to ensure the full and effective participation of stakeholders, as well as different participatory processes carried out within the framework of the development of the ENBCS, some key elements of which for the 2015-2017 period are summarized below.

The National Commission on Climate Change was consolidated through the Climate Change Law. The Commission is composed of permanent members and advisory members, including representatives of public institutions, private sector, NGOs and indigenous organizations, among others. This national entity deals with issues related to climate change, including REDD+.

Paraguay has supported the full and effective participation of stakeholders in REDD+ preparation processes by designing and implementing specific participation and communication plans.

The ENBCS has been constructed collectively, with a gender approach and the promotion of participation of key stakeholders. These key actors were identified and involved in the REDD+ work following the guidelines of the stakeholder identification and mapping carried out in 2015 within the framework of the UN-REDD National Programme.

Within the ENBCS framework, Paraguay also developed a "Stakeholder Participation Plan" in 2017 to ensure the participation of different stakeholders and interest groups associated with forests, in order to establish effective coordination mechanisms between different actors and scales. The process of development, socialization and validation of the ENBCS, and the policies and measures it establishes, was carried out with representatives of the public sector, private sector, civil society, academia, indigenous peoples, small farmer (campesino) organizations, and financial entities.

Indigenous peoples were identified as key stakeholders for the design and implementation of the ENBCS. The participation plan brought together representatives of different indigenous organizations and communities at a national level, with specific activities in two pilot departments. Participation of forest-dependent communities and small farmers (campesinos) was also promoted.

Intercultural dialogue and management processes were planned in accordance with the "UN-REDD Programme Guidance on Free, Prior and Informed Consent" and guidelines for the involvement of relevant stakeholders in the preparation of REDD+, with a focus on the participation of indigenous peoples and other forest-dependent communities. Recommendations for indigenous peoples’ participation were also identified and applied based on the practices and recommendations of INDI and the experiences of FAPI. Capacity-building sessions for indigenous peoples in Guaraní and Spanish were carried out.

Protocols of free, prior and informed consent were applied in accordance with the norms established in international conventions and national legislation. Respect and recognition of cultural diversity were recognized as key elements for developing REDD+ actions in an appropriate manner and helped inform the development of communication tools, based on those developed by INDI, and with collaboration from FAPI. These tools included: publications shared through social networks; newsletters; printed communication materials; tutorials; and audiovisual materials, among others.

Paraguay has been working on the consolidation of the stakeholder participation plan, which will inform the Implementation Plan for the ENBCS.

- That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.

Comments:

The government of Paraguay has developed national legislation to protect natural forests, prevent deforestation and restore forests in certain areas, with MADES responsible for general environmental supervision, and INFONA in charge of applying the Forest Law 422/73. This is the main legal framework for the forest sector in...
Paraguay, establishing incentives for reforestation; designating forests as reserves, for forest production or as semi-protected forest; and establishing regulations to protect forest resources.

Through Law 422/73, farms with forest areas are obliged to maintain 25% of the original forest area and forest type. In addition, forests must be protected near water courses (with a buffer zone of 100 meters on each side). In the case of restoration, protective forests near water courses, restoration must be carried out with native species.

It is also important to highlight that Paraguay has decided to include only native forests in the definition of forest under REDD+, excluding forest plantations with exotic species. The definition of forest is described in section B1 of this document. During the construction of the FREL and the analysis of the results, efforts were made to exclude forest plantations from the emissions reduction reports.

The ENBCS aims to contribute to sustainable development, based on Paraguay's National Development Plan 2030. It includes as a priority PAM at the national level the conservation of forest remnants through the implementation of the Environmental Services Regime. This offers financial incentives for conservation, under a voluntary market. Likewise, the continuation of the Zero Deforestation Law (which is part of the legal framework in which the ENBCS will be implemented) in the Eastern Region is a measure that aims at biodiversity conservation. REDD+ PAMs in the ENBCS are compatible with the conservation of natural forests and their non-conversion, as well as incentives for the conservation of forests and derived services, and the strengthening of the provision of other social and environmental benefits. They are also consistent with Paraguay's National Strategy and Action Plan for Biodiversity Conservation 2015-2020, which seeks to identify, characterize, and prioritize the main processes and trends of political, economic, social, and environmental changes that affect the supply of goods and services provided by ecosystems.

The implementation of REDD+ in Paraguay offers significant potential for the provision of non-carbon benefits. The provision of such benefits is explicitly considered in a number of policies and measures included in the ENBCS (see section C.2.6 for more information).

The Law 3001/06 on Valuation and Compensation of Environmental Services is considered a key measure to implement REDD+ in the country, as it considers the benefits provided to the population directly or indirectly by management activities, conservation and restoration of ecosystem functions. These benefits include: mitigation of emissions, protection of water resources and biodiversity, scenic beauty and protection and recovery of soils, among others. In addition, there is a Law for the Restoration of Protective Forests, which seeks to conserve and restore protective forests of watercourses in the Eastern Region and compliance with environmental protection measures for water resources in the Western Region (Chaco).

During the 2015-2017 period, the following activities, among others, were carried out in support of the conservation of natural forests and biodiversity, and the development of incentives for the protection of forests and their ecosystem services (more detailed information is provided in the First Summary of Information on Addressing and Respecting REDD+ Safeguards in Paraguay for the period 2011-2018):

- Inventories and information on the state of forests and priorities for their conservation were developed.
- Information on forests and deforestation was updated, including in the Third National Communication, completed in 2016.
- The valuation of Environmental Services and regulation of the compensation of environmental services were promoted, under Law 3001/06.
- Studies were developed on: drivers of deforestation; analysis of existing information on the current state of forests and the main causes and agents of deforestation; analysis of land tenure, different types of ownership and links with deforestation; future deforestation scenarios.
- Two studies of multiple benefits of REDD+ were developed, with spatial analysis to identify areas where REDD+ measures could provide multiple benefits, and those areas under pressure from deforestation or with other risks associated. This helped to ensure that both the multiple benefits and risks associated with REDD+ are duly considered in Paraguay's planning processes, which is also an approach aligned with REDD+ safeguards. See section C.2.6 for more information.

(vi) Actions to address the risks of reversals.

Comments:

To ensure that the reduction of emissions is sustainable, the design of REDD+ policies and measures in Paraguay takes into consideration the risks of reversal of emissions. Within the framework of the ENBCS, and other actions focused on the reduction of emissions, the direct, indirect and underlying causes of deforestation and forest degradation are addressed. The actions seek to encourage emission reductions, so that the
reductions achieved can last over time and be sustainable, and are not only conserved during the duration of the project.

Actions have been developed to address illegal logging, as well as human-induced fires.

One of the most important strategies to address the risk of reversals is the implementation of efficient strategies that strengthen control and the capacity for inspection by national authorities, with emphasis on the actions of INFONA as the forest authority, and MADES as the environmental authority.

One of the measures for forest monitoring and control is the official creation of the National Forest Monitoring System by Law No. 6256 of 2018, although the development of this system began in previous years. The objective of the system is to provide official information on national forest cover on a periodic basis. The system is now coordinated by INFONA and MADES. Prior to this law (since 2014), INFONA and MADES coordinated those actions based on a tacit agreement.

Additionally, INFONA, through an agreement with the World Resources Institute, is in the design and implementation phase of the Global Forest Watch at the national level, to provide data on deforestation almost in real time (with a periodicity of 8 days). This platform will be managed locally and will allow authorities and the general public to access and manage data in a user-friendly way. Among its objectives, INFONA plans to train technicians from the regions for rapid response to deforestation cases using the data provided by the tool.

This data will also be used to monitor farms that carry out agricultural and forestry activities with permits from the national authority by cross-checking the information with the cadaster of forestry and agricultural projects that INFONA has under the Forestry Law and MADES under the Environmental Impact Assessment Law.

Both INFONA and MADES have the authority to carry out on-the-spot audits under the mandate of the laws in their jurisdiction. The Forestry Law dates from 1973 and the Environmental Impact Assessment Law dates from 1993.

In addition, the Zero Deforestation Law was created in 2004, and was amended in 2006 for two years, in 2008 for five years, in 2013 for 5 years and in 2018 for another 2 years. This series of extensions has also been an important measure to continue the protection of forests and prevent the conversion of forested areas to agricultural or livestock use. Because the Law only refers to the country's Eastern Region, there is a limitation on its ability to ensure the permanence of emissions reductions throughout the entire country.

One of the most important tools to achieve the effectiveness of the Zero Deforestation Law in the Eastern Region in the medium- and long-term has been Law 3001/06 on "Valuation and Compensation of Environmental Services" whose objective is to increase the value of native forests through a payments for environmental services scheme. Law 3001 will allow forest holders in the Western Region, who wish to maintain forest reserve areas greater than those required by the Forestry Law (currently they must maintain at least 25% of the original forest area and forest type), to receive additional economic incentives. During 2015, 2016 and 2017 new land has been certified under the payments for environmental services scheme and these certifications are valid for 5 years and can subsequently be extended.

The ENBCS also focuses on the implementation of sound agricultural and livestock practices that allow forest holders to increase the efficiency and profitability of agricultural activities, reducing the need to increase the area used for the activities to the detriment of the forest cover.

The following activities, among others, were carried out during the period 2015-2017:

- Support to the intensification of production to reduce the expansion of the agricultural frontier.
- Environmental licensing processes aimed at the conservation and protection of forests and the care of the margins of the water rounds and the maintenance of windbreaks to mitigate and prevent wind erosion were promoted.
- Environmental licensing through MADES and INFONA considered land-use planning as a key instrument for decision-making.
- Guidelines to strengthen the Environmental Information System were developed.
- A national inventory of forests and carbon was carried out.
- The National Forest Monitoring System (NFMS), established in INFONA, was developed and strengthened. One of the functions of the system is to generate maps of forest cover and land-use change at the national level with a minimum sampling unit of one hectare. This is produced annually, allowing the identification
of the reversals that have taken place. These maps have been generated annually since 2015, and historical records have been kept since the year 2000. These maps are available on the INFONA website.

- Capacity building sessions for GIS teams of MADES and INFONA have taken place, focused on the preparation of thematic maps, future deforestation scenarios and multiple benefits mapping of REDD+.
- Development of Forest Reference Emission Level from Deforestation in the Republic of Paraguay for payment for REDD+ results under the UNFCCC (2015).
- A study identifying and analyzing risks of deforestation in the country was published in 2016.

In addition to the comprehensive set of activities listed above, this proposal contemplates the establishment of a buffer to further diminish the risk of reversals. The size of this buffer can be estimated following established criteria, particularly the guidelines set by the Carbon Fund. These guidelines propose the establishment of buffers whose size depend on the level of uncertainties and reversal risk factors. The uncertainties in the volume of emission reductions is an issue also addressed in the application of the GCF scorecard. The reversal risks reflect local conditions where the emission reductions take place.

The application of the Carbon Fund guidelines to the institutional, environmental and other factors in Paraguay resulted in a size of a buffer equal to 18% of total volume submitted to the GCF. If solicited as part of the proposal review process, Paraguay would set aside a portion of the emission reductions to establish a buffer account. Finally, preliminary estimations of results from 2018 appear to indicate that annual emission reductions will fall to average levels, providing further assurances that the results submitted to the GCF may not be outliers but rather reflect a trend.

- Actions to reduce displacement of emissions.

Comments:

To ensure that the implementation of REDD+ will not cause leakage or displacement of deforestation to other areas (at the local level or other areas of the national territory) during the process of selection, design and implementation of REDD+ policies and measures, the following issues are considered in Paraguay:

- Addressing the direct, indirect and underlying causes of deforestation and forest degradation in the development of the ENBCS. The importance of identifying the causes of deforestation and forest degradation in the country is highlighted in order to develop appropriate REDD+ policies and measures to address them, taking into account possible effects and consequences in other areas. For example, the application of the Zero Deforestation Law in the Eastern Region has resulted in important effects in the Chaco region. The implementation of Decree 7702/17 (now repealed by Decree 175/18), which allowed forest legal reserve areas to be replaced by the acquisition of environmental service certificates for a period of one year also had effects in the Chaco region.
- Potential impacts on livelihoods.
- Impacts on supply and demand for forest and agricultural producers.
- Forest control and monitoring systems to detect and report displacement.

In Paraguay, the design and implementation REDD+ PAMS to reduce deforestation seek to ensure that avoided deforestation in one area does not simply result in deforestation in other areas. Within this framework, Paraguay designs actions to address the causes of deforestation and forest degradation, and seeks to implement positive actions to enhance the benefits of sustainable development, for example with agroforestry practices, combining various techniques both agricultural and livestock with actions of protection and sustainable use of forest resources.

In addition, Paraguay has a National Forest Monitoring System that generates information based on remote sensing and field data robust enough to detect and estimate displacement of emissions by deforestation at the level of ecoregions, departments or municipalities. Since 2015, MADES and INFONA have worked together on the forest monitoring system, with tacit work agreements that have served to generate efficient information processing for product generation and validation. In addition, INFONA is in the development phase of a deforestation early warning system using the Global Forest Watch platform, which will provide information every eight days and whose data will contribute to NFMS.

The NFMS generated the data for the preparation of the FREL (period 2000-2015) in 2016 and for the Technical Annex for Payments for Results in 2018 (period 2015-2017). Both products have followed the same methodology and there is correlation and consistency between the data used and the results obtained. The NFMS has also provided information for the first BUR (2015) and the Third National Communication (2017).
Since 2018 the NFMS is endorsed by Law No. 6256 to provide official information on the state of national forest cover in a periodic, measurable and verifiable way. The structure of coordination between MADES and INFONA is currently in the process of being regulated.

One of the strategic objectives of the ENBCS is the promotion and implementation of the land-use planning at the municipal level. The inclusion of forest resources in the land-use planning processes contributes to building a landscape-scale vision, which also recognizes the importance of non-carbon benefits such as biodiversity, as well as carbon benefits of forests.

The following activities, among others, were carried out during the 2015-2017 outcome period of this proposal:

- Development of the national REDD+ strategy, the ENBCS, with on workshops and meetings with various institutions and key actors, and with the objectives to address the direct, indirect and underlying causes of deforestation.
- Updating of analyses on the direct and indirect causes of deforestation.
- Completion of the survey of forest plots of the National Forest Inventory, which is a key input for the Reference Level and the presentation of national reports.
- Development and strengthening of the NFMS. As mentioned above, work has begun on early warnings associated with deforestation risks.

C.1.2. Stakeholder involvement.

Please describe and provide evidence that the Cancun safeguards information was made transparently available to stakeholders.

The development of the ENBCS and the design of REDD+ PAMs in the country encompassed a process of collective construction, promoting the participation of key actors, and ensuring a gender approach was considered throughout. Information on the Cancun safeguards is managed in a transparent manner and has been made readily available to key stakeholders.

The first summary of safeguards information for Paraguay (Primer Resumen de Información sobre el Abordaje y Respeto de las Salvaguardas de REDD+ en Paraguay para el período 2011-2018) is based on the foundations of transparency and accessibility and was developed through an extensive participatory process. The document summarizes existing information in national documents related to safeguards, and associated processes that were carried out during the REDD+ readiness phase and during the development of the ENBCS. The document also provides information on the stakeholder engagement process and on the integration of a gender approach. Participatory processes in which various government institutions, the private sector and civil society – including indigenous peoples’ representatives – participated effectively resulted in the generation of a number of documents which were reviewed for the summary of information. The document is available on the REDD+ Web Platform of the UNFCCC.

The first version of the Safeguard Information System (SIS) is currently hosted on the website of MADES’ National Climate Change Department (Direccion Nacional de Cambio Climatico). This follows the UNFCCC guidance of providing information on how safeguards are being addressed and respected in a transparent manner, accessible to all relevant stakeholders. The information generated by the SIS will be translated and disseminated in culturally appropriate manners.

Throughout the implementation of the UN-REDD Programme (2011-2016) and the FCPF project BCS (from 2017 onwards) Paraguay implemented strategies for engaging relevant stakeholders and for ensuring transparency and access to information on safeguards. During the development of the ENBCS, work was undertaken to provide information and communicate about safeguards in a culturally appropriate manner. The documents generated as a result of this work on stakeholder engagement are available through the following links, ensuring that they are also accessible to a wider public:

7 See, for example, the following documents: http://archivo.seam.gov.py/programas-y-proyectos/onuredd/materiales-onu-redd, http://www.fapi.org.py/la-fapi-participa-de-unas-sesiones-de-trabajo-sobre-salvaguardas/ and http://www.fapi.org.py/programa-de-reduccion-de-emisiones-por-deforestacion-y-degradacion-presenta-los-resultados-de-cinco-anos-de-trabajo/.

8 See the stakeholder engagement plan, https://www.undp.org/content/dam/paraguay/docs/Plan%20de%20Participaci%C3%B3n%20BCS%20FCPF.pdf. Additional resources: http://www.py.undp.org/content/paraguay/es/home/operations/projects/poverty_reduction/fase-preparatoria-de-proyecto-para-la-implementacion-de-donacion.html.
Paraguay's UN-REDD National Programme began working on REDD+ in 20119 in an inclusive manner, with representation from the government and civil society (in this case an indigenous association). The programme was comprised of the then Secretary of the Environment (SEAM, now MADES), INFONA, and FAPI. The three organizations presided over an inclusive process that resulted in numerous advances in different aspects of Paraguay's approach to safeguards. A summary of the key milestones is included below:

- November 2011 – a workshop was held focused on the identification and analysis of potential benefits and risks of REDD+ actions in Paraguay, in accordance with a country approach to safeguards.

- April 2013 – two workshops on "Environmental and Social Safeguards and Human Rights" were held. These were convened by FAPI, SEAM (now MADES), INFONA and the UN-REDD Programme. Approximately 40 people from various institutional sectors and members of the indigenous communities organized by FAPI participated. The workshops examined the existing framework related to REDD+ safeguards in Paraguay, identifying gaps in forest protection and rights in the legal framework, to be addressed through PAMs developed in the ENBCS.

- September 2013 – a workshop on REDD+ safeguards and social and environmental benefits was held and attended by 30 participants. The workshop focused on the Cancun safeguards; on developing a common understanding of what they mean in the Paraguayan context; and, on how actions can be designed and implemented to enhance social and environmental benefits and to mitigate or avoid risks in accordance with the Cancun safeguards.

- April 2014 - a working session on social and environmental benefits of REDD+ was held. This session focused on how to consider safeguards in planning REDD+ actions. The creation of a REDD+ Safeguards Working Group was planned.

- September-October 2015 – working sessions and workshops on REDD+ safeguards and multiple benefits were held with the REDD+ Safeguards Working Group in Paraguay and the National Technical Team of the UN-REDD National Programme. The working sessions focused on strengthening national capacities on safeguards and multiple benefits; the participatory development of a national roadmap on safeguards, including the development of the national interpretation of the Cancun Safeguards and a proposal for the design of the SIS.

- May 2016 – a series of workshops and meetings were weld focused on the development of REDD+ PAMs to feed into the development of the ENBCS. Work was carried out to produce the inputs needed to consolidate the national approach safeguards. This included a legal analysis on REDD+ safeguards; the interpretation of the Cancun safeguards; and a plan for the development of the SIS.

- July 2016 – a series of workshops and working sessions were held focused on multiple benefits of REDD+ and the Cancun safeguards. The working sessions emphasised information exchange and national capacity building towards understanding and applying the Cancun safeguards in the development and implementation of the ENBCS.

In addition, as part of the Bosques para el Crecimiento Sostenible project, a Technical Committee was created. It was comprised of 12 public institutions linked to sustainable development and organized in working groups for the different activities of the project and based on the expected participation of each institution in the different project components. Between 2017-2018, the Committee was involved in activities related to the design of the SIS.

The BCS project team and personnel within MADES have also received trainings on the processes of Strategic Environmental and Social Analysis (SESA) and on the Environmental and Social Management Framework (ESMF). These trainings contributed to the collection of information on social and environmental risks, as well

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9 In 2008, the Government of Paraguay submitted a request to join the UN-REDD Programme, becoming a partner country in September 2008.
as on the benefits identified, from different stakeholders during the consultation and socialization process for
the ENBCS. In addition to information gathered during process of socialization of the ENBCS, meetings with
focus groups were held to analyse environmental and social safeguards. Internal training exercises on
SESA/ESMF have been designed and a roadmap is being prepared to develop a unified process for
safeguards, including the SESA/ESMF and the different safeguard requirements of different climate finance
entities.10

The National REDD+ Focal Point (MADES) has also requested the Secretario de la Comisión Nacional de
Cambio Climatico (Secretary of the National Commission on Climate Change) to establish a REDD+
Roundtable. This will be comprised of members of the Commission and other stakeholders not represented
on the Technical Committee such as indigenous peoples, civil society, academia and the private sector. The
REDD+ Roundtable began its activities in the second half of 2018 and will also be addressing issues related
to REDD+ safeguards.

The Annex on the Environmental and Social Management Framework contains the guidelines about how
stakeholder engagement will take place during project implementation.

C.2. Use of proceeds and non-carbon benefits

C.2.1. General description:

Provide a description on how the proceeds will be reinvested in activities consistent with the country’s NDC,
national REDD-plus strategy and/or low carbon development plans and policies. The description should also
include how the proceeds will be used in a manner that contributes to the long-term sustainability of REDD-
plus activities, including non-carbon benefits.

Paraguay has approximately 18.5 million hectares of forest areas. Its deforestation rate has been one of the
largest worldwide with an average loss of 286,000 hectares per year11. However, this situation has begun to
change through implementation of elements included in the National Strategy for Forests and Sustainable
Growth (ENBCS). The ENBCS is based on a comprehensive analysis of direct and indirect causes of forest
loss, barriers to change and legal/regulatory framework. This strategy is the result of an extensive participatory
process of socialization and consultations with key stakeholders in which 306 representatives participated, 46%
of which women, from the public and private sectors, indigenous peoples, producer organizations, academia,
the financial sector, and civil society. In addition, the government of Paraguay has recently established the
National Climate Change Fund, which is expected to have a key role in financing actions towards Nationally
Determined Contributions (NDCs), REDD+ activities and low carbon development.

In view of the above, results-based payments will be invested in the implementation of the National Strategy
for Forests and Sustainable Growth (ENBCS) and in the establishment and capitalization of the Climate
Change Fund.

The strategic objectives of ENBCS are:

• To promote competitive agricultural and livestock production through the sustainable management of
  natural resources.
• To reduce the loss and degradation of forests by incorporating sustainable management practices.
• To promote the sustainable use of forests by strengthening the natural and cultural heritage of indigenous
  communities.
• Promote land-use planning at the municipal level.
• Improve climate change mitigation planning in the LULUCF sector.

The cross-cutting strategic objective of the ENBCS is to strengthen institutional forest governance capacities
including monitoring and enforcement.

The use of RBPs have been divided into two main outputs, as follows:

Output 1 – Capacities, enabling environment and monitoring systems put in place for the
implementation of the ENBCS

The ENBCS provides the general framework for implementing concrete actions to address the direct and
underlying drivers of deforestation and forest degradation. The set of activities grouped under Output 1 will

10 https://www.forestcarbonpartnership.org/sites/fcp/files/Paraguay_FCPF-RF%202018%20Report%20Final%20Spanish_0.pdf
11 Statistics provided by the Ministry of the Environment (SEAM).
support several components of the ENBCS. These include securing legal titles for protected areas and completing their zoning plans, the strengthening of ongoing activities to reduce deforestation and support to sustainable production protocols in agroforestry, silvopastoral systems, forest management and biomass. Indigenous and small rural farmer communities will have greater access to sustainable economic alternatives.

RBPs will be used to significantly strengthen human resources and operational capacities at both INFONA and MADES for the enforcement of existing laws. Basic infrastructure and equipment is often lacking. Important operational elements like connection with regional offices are missing. Mobility is restricted and limits capacity to do field inspections. The rapid response system against illegal deforestation and forest fires requires much improved human and capital investments. Particular attention will go to reinforce inter-institutional coordination mechanisms. The forestry and environmental monitoring systems will be consolidated and updated jointly between MADES and INFONA. The monitoring system will be used for regulation of actions and enforcement of the Forestry Law. Monitoring capacities will include the INGEI of LULUCF/AFOLU sector.

It is also key to significantly strengthen incentives for forest conservation. In this regards, Paraguay approved the establishment of a system of Payments for Environmental Services (PES; Law 3001/06). This innovative system has a great potential to reduce deforestation rates in Paraguay and does not require the public treasury to be the source of payments. Rather, these take place between private actors with surpluses and deficits in the legally required are for forest conservation. RBPs will thus not be used to support payments but rather to make the mechanism fully operational. This will include (i) simplifying and digitalizing processes to substantially diminish transaction costs; (ii) strengthening enforcement and monitoring.

Strengthening the mechanisms for territorial governance is an important action. The strengthening of territorial governance through MADES/INFONA regional offices and mechanisms for planning and regulating land use (support for land-use planning) will improve control and effective enforcement of forestry and environmental laws. I would also help to reinforce the legal standing of public and private protected areas. Monitoring, supervision and enforcement capacities will receive a major boost.

The full respect of social and environmental safeguards including the mainstreaming of gender issues will be an action transversal to the whole set of activities financed by RBPs. As part of Output 1, RBPs will finance the implementation of a monitoring and reporting mechanism for safeguards. Also, a participation plan and a grievance redress mechanism will be established. Finally, the project management unit will count with a knowledge management and communication specialist entrusted with capturing and systematizing lessons learned, disseminating information to targeted audiences and advocacy. The project will support South-South exchanges as much as possible. Table 14 provides a detailed description on the use of proceeds.

Output 2 – Governance and operational procedures of the Climate Change Fund established and finance channelled to NDCs, the ENBCS and low carbon development plans (see Annex 8)

The National Climate Change Fund (NCCF) was created in the year 2018, through the National Climate Change Act (Law No. 5875/2018). In its article 14, the Law “Creates the Climate Change Fund, which will be under the responsibility of the Secretariat of the Environment (today MADES; former SEAM), its purpose will be to attract and deploy public, private, national and international financial resources to support the implementation of actions to address Climate Change. Actions related to adaptation will be a priority in the application of the Fund’s resources”

While the NCCF has been established by law, it is still not operational. There is a need to define the NCCF’s governance structure, procedures for operation, responsibilities, accountability, the criteria for allocation of resources, safeguards to be applied, risk management, and the definition of the type/conditions of grant and financial products that the NCCF will offer.

This presents a unique opportunity to set up a long-term financing mechanism for REDD+ actions with world-class standards for transparency, participation and application of safeguards. The proceeds from RBPs will support the establishment of an RBPs window at the NCCF to provide a solid platform for participatory decision making for the investment of resources in the implementation of the REDD+ strategy. The application of GCF and UN Environment safeguards and risk management procedures would ensure a “no-regrets” policy in the implementation of actions and measures. A structure designed to ensure participation of stakeholders involved in anti-deforestation actions would contribute much to an equitable distribution of benefits. Equally importantly, the NCCF would be a platform with a governance structure sufficiently solid so as to make Paraguay over time less dependent on multilateral and other type of institutions for technical and administrative assistance in the management of external funds.
In view of the above, RBPs will be invested in defining the procedures for operation, responsibilities, accountability, structuring and the criteria for allocation of resources, always in line with the principle of transparency, integrity, and gender equality. RBPs will also support the identification and definition of the type/conditions of grant and financial products that the RBPs window at the NCCF will offer. Once the rules of operation have been established, and sufficient safeguards are in place, the AE will proceed to disburse RBPs to capitalize the NCCF.

There will be special requirements for the allocation of RBPs through the NCCF. Contributions from RBPs will be kept in a separate sub-account and will be used to support activities in line with the NDCs, the remaining components of the ENBCS not included in Output 1, and low carbon development plans. Activities/projects funded by RBPs through the NCCF will be consistent with the objectives of the GCF. RBPs may only be used to finance activities/projects with low or moderate risk, as defined by the AE protocol for risk assessment. The use of RBPs will adhere to the ESMF, which constitutes an integral part of this Full Proposal package, and will be consistent with the gender action plan. Throughout the operations of the NCCF, there will be dedicated team of local and international experts verifying that the use of RBPs is in compliance with the above stated conditions. Each project to be supported will have the corresponding monitoring activities and audits.

On the sustainability of the fund, the Law 5785 establishes that contributions to the NCCF may come from “(i) the annual resources contemplated in the National Budget; (ii) contributions, payment of rights and uses foreseen in the corresponding Laws; (iii) donations from natural or legal persons, national or international; (iv) contributions made by other countries governments and international agencies; and (v) any other resources obtained under other legal provisions.” We expect that once the NCCF is fully operational, its high standards of transparency, participation and safeguard requirements will attract co-financing from different sources. Targets of interest include the private sector and the energy sector (which already contributes funds to a range of environmental activities), in addition to contributions from the National Budget. The structuring of the NCCF also provides opportunities for leveraging its resources through blended finance and participation into investment vehicles. MADES is already assessing options to ensure regular contributions to the NCCF from fees and taxes.

The full implementation of the ENBCS should also result in the creation of "virtuous circles", where the decrease in deforestation rates opens the possibility of accessing new payments, which are then invested in forest protection, promoting additional decreases in deforestation and thereby allowing continued access to payments. This would have a strong political effect in Paraguay by showing that the environmental sector can generate significant economic resources in addition to those benefits achieved by protecting the environment. If the project is successful in establishing this dynamic, and therefore attract a regular flow of resources, the sustainability prospects of the Climate Change Fund would be greatly improved.

Annex 8 provides a description of the structure and operational modalities under discussion for the NCCF.

Consistency with Paraguay’s NDC
The Government of Paraguay developed its NDC in alignment with its National Development Plan for 2014-2030. The goal established by Paraguay in its NDC is to avoid emissions for 429 MtCO2eq during the period of implementation of the action plan (2014-2030) and from 2030 onwards to avoid emissions in the amount of 83 MtCO2 eq. annually.

The NDC established a target of 20% of emissions reductions relative to a projected BAU for 2030. The country set a target of emissions reductions of 10% relative to a BAU for 2030, and an additional conditional target of 10% of emissions reductions relative to a BAU for 2030.

The Third National Communication on Climate Change (2017) determines the baseline according to the following parameters:

- Projected emissions: Projected National GHG Inventory using 2011 as the base year: 140 million tons of CO2 equivalent (under review).
- Projected National GHG Inventory with 2020 as the base year: 232 million tons of CO2 equivalent (under review).
- Projected National GHG Inventory with 2030 as a base year: 416 million tones of CO2 equivalent (under review).
The Second Biennial Update Report (2018) outlines the main lines of mitigation actions as part of the country’s implementation of its NDC. The activities proposed for the use of the proceeds coming from this GCF REDD+ pilot programme are aligned to two of the lines of action:

- Reduce and avoid deforestation, through payment mechanisms for conservation and for reducing deforestation.
- Encourage the implementation of agriculture with new technologies: reduction in the use of nitrogen fertilizers, reduction in the burning of land for new agricultural fields, introduction of technologies with climate benefits, etc.

These actions are directly related to the AFOLU sector which is the greatest historical contributor of GHG emissions in Paraguay.

Paraguay is in the process of elaborating an NDC Implementation Plan, which integrates measures of the ENBCS as fundamental components for the process to reduce GHG emissions by 2030. The ENBCS is therefore a guiding document for the management of PAMs that contribute to the implementation of the NDC presented by the country to the international community, within the scope of the Paris Agreement.

The document also recognizes the need for Paraguay to receive institutional strengthening for the implementation of public policies aimed at reducing emissions as well as strengthening MRV mechanisms.

The results-based payments received by Paraguay from the GCF will contribute to the implementation of actions for the mitigation component of Paraguay’s NDC.

C.2.2. Expected outputs and outcomes:

The following table provides information on the contribution of this proposal to the Fund Level Outcomes.

**Table 11:** expected outputs and fund level outcomes

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Fund Level Outcomes</th>
</tr>
</thead>
</table>
| **Output 1.** Capacities, enabling environment and monitoring systems put in place for the implementation of the ENBCS | **M5.0 Strengthened institutional and regulatory systems**  
• The capacities of MADES and INFONA to implement ENBCS are strengthened, with high levels of participation of stakeholders and compliance with safeguards.  
• An enabling environment to implement the ENBCS (includes piloting sustainable economic alternatives for local actors, such as peasant and indigenous communities) is created.  
• The National Forest Monitoring System (National Forest Inventory, terrestrial monitoring satellite systems, and the INGEI of the LULUCF/AFOLU sector) is consolidated.  
• A safeguards compliance monitoring and reporting compliance system is consolidated  
• Project lessons and results communicated to promote a paradigm shift on forest and sustainable development |
| **Output 2.** Governance and operational procedures of Climate Change Fund established and finance channelled to NDCs, the ENBCS and low carbon development plans | **M9.0 Improved management of land and forest**  
• A strengthened regulatory framework facilitates land use regulation and the control and monitoring of land use in forest lands and reduces deforestation.  
• Financial incentives (subsidies, tailor-made credits, guarantee funds) reduce deforestation drivers.  
• Market for environmental services encourage forest conservation  
• Communication campaign positively affects people’s behaviour towards forest conservation and sustainable production |
C.2.3. Timeframe of implementation (for monitoring and reporting purposes):

Please provide the following information:

**Table 12:** outputs and expected year of achievement

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Expected year to be achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output 1.</strong> Capacities, enabling environment and monitoring systems put in place for the implementation of the ENBCS</td>
<td>Year 6</td>
</tr>
<tr>
<td><strong>Output 2.</strong> Governance and operational procedures of Climate Change Fund established and finance channelled to NDCs, the ENBCS and low carbon development plans</td>
<td>Year 6</td>
</tr>
</tbody>
</table>

C.2.4. Budget estimate (for monitoring and reporting purposes):

Based on the ITAP evaluation and the results of the scorecard, the volume of ERs that qualifies for payments is 14,145,000 t/CO2eq. At 5 USD/tCO2eq and an additional 2.5% for non-carbon elements, this translates into a payment of 72,493,125 USD.

The budget presented in tables 13 and 14 has been developed through a joint effort by MADES, INFONA, STP, UN Environment and other stakeholders. The total of 50,000,000 USD reflects the ceiling of the Accredited Agency. The total volume of ERs that correspond to this figure is 9,756,097.56 tCO2eq.

In regards to the volume of payments not included in the budget below (22,493,125 USD), Paraguay may choose to present a subsequent proposal for these remaining funds at a later Board meeting.

**Table 13:** Outputs and total expected budget

<table>
<thead>
<tr>
<th>Output</th>
<th>Indicative cost (USD)</th>
<th>GCF proceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output 1.</strong> Capacities, enabling environment and monitoring systems put in place for the implementation of the ENBCS</td>
<td>26,100,000</td>
<td>26,100,000</td>
</tr>
<tr>
<td><strong>Output 2.</strong> Governance and operational procedures of Climate Change Fund established and finance channelled to NDCs, the ENBCS and low carbon development plans</td>
<td>18,667,500</td>
<td>18,667,500</td>
</tr>
<tr>
<td>Project management</td>
<td>5,232,500</td>
<td>5,232,500</td>
</tr>
<tr>
<td><strong>Indicative total cost and currency (USD)</strong></td>
<td>50,000,000</td>
<td>50,000,000</td>
</tr>
</tbody>
</table>

Table 14 below presents the description of activity/projects for both Output 1 and Output 2. The table shows the indicative total cost for both outputs (without project management costs).

**Table 14:** Outputs, activities and budget
<table>
<thead>
<tr>
<th>Output</th>
<th>Sub-output</th>
<th>Activity/Project</th>
<th>Relation to measures and actions in the ENBCS</th>
<th>Details</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Actions to improve conservation in public and private nature protected areas (legal titles; land use planning).</td>
<td>Measure 6. Sustainable Forest Management</td>
<td>Strengthening of the ASPs and update of the SINASIP, including strengthening of MADES, titling procedures, infrastructure improvement and management plans development.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Early actions in the ENBCS delivered</td>
<td>Measure 9. Development of capacities for environmental regulation, control, monitoring and penalization.</td>
<td>Strengthening of the components (3) of the National Forest Monitoring System (MADES - INFONA)</td>
<td>Establishement of the system of monitoring, reporting and verification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rapid institutional response to alerts of deforestation and / or degradation.</td>
<td>Measure 6. Sustainable Forest Management</td>
<td>Development and pilot implementation of a countrywide plan for forest restoration</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Identification and strengthening of ongoing programs and actions to reduce deforestation</td>
<td>Measure 5. Adopt entrenchment (arraigo) policies</td>
<td>Strengthening of income diversification programs and sustainable production systems (medicinal plants, honey, yerba mate, fruits, ecotourism, organic products) and commercialization of products.</td>
<td></td>
</tr>
<tr>
<td>Measure 2. Sustainable Production Systems</td>
<td>Support and training mechanisms for small producers, indigenous peoples and other local communities, including training on business plans, sustainable production, etc.</td>
<td></td>
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<tr>
<td>Action 2.3. Improve the efficiency in use of soil resources in production processes.</td>
<td>Strengthening of existing platforms for facilitating the implementation of sustainable production action plans encouraging gender balance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure 8. Legal framework adaptation and policy articulation</td>
<td>Review/adjustment of the environmental and forestry legal framework and decentralization in participatory, multi-sectoral processes (including adequate management of environmental and social risks).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure 1. Legal framework that prohibits land use change in the Eastern region of Paraguay</td>
<td>Support to political process to extend the prohibition of land use change in the Eastern region.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure 9. Development of capacities for environmental regulation, control, monitoring and penalization.</td>
<td>Strengthening of capacities of the national institutions involved in the implementation of the joint intervention protocol for complaints and whistle blowers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure 9. Development of capacities for environmental regulation, control, monitoring and penalization.</td>
<td>Strengthening of the control system for enforcement of the environmental legal framework (MADES)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strengthening of the control system for enforcement of the forest legal framework (INFONA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Development of capacities for environmental regulation, control and penalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strengthening of MADES infrastructure capacities (building, renovation, maintenance, amplifications, in the regional offices and in the headquarters) to ensure adequate operational capacities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strengthening HR capacities for REDD+ implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safeguards information and monitoring system</td>
<td>Implementation, monitoring and reporting on the full respect of safeguards and gender actions.</td>
<td>Measure 9. Development of capacities for environmental regulation, control, monitoring and penalization.</td>
<td>Implementation of the Safeguards Monitoring System and report in a participatory and multisectoral process based on CPLI guidelines.</td>
<td>450,000</td>
<td></td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>System of Payments for Environmental Services strengthened</td>
<td>RBPs will be invested in making the system for environmental services fully operational. This will include (i) simplifying and digitalizing processes to substantially diminish transaction costs for demand and supply actors; (ii) strengthen enforcement and monitoring</td>
<td>Measure 3: Promotion of environmental services, valuation of natural capital and of environmental services in all their modalities and procurement mechanisms.</td>
<td>Adjustment in regulations to Paraguay's National Policy on Environmental Services</td>
<td>2,050,000</td>
<td></td>
</tr>
<tr>
<td>Strengthening territorial governance in the areas of environment and forestry</td>
<td>Strengthening of land use governance through improved planning and regulation</td>
<td>Measure 8. Legal framework adaptation and policy articulation</td>
<td>Strengthening of municipal governance through territorial use planning and regulation mechanisms (support to Territorial Planning including establishment of biological corridors).</td>
<td>3,000,000</td>
<td></td>
</tr>
<tr>
<td>Project lessons and results communicated.</td>
<td>Communication and knowledge management products</td>
<td>Applies to all actions of the ENBCS</td>
<td>Promotion and distribution of the results achieved in the implementation of ENBCS actions linked to the GCF Result based payments project.</td>
<td>1,050,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Impact on the behaviour of key actors for the reduction of deforestation (officials, producers, producer associations)</td>
<td>Applies to all actions of the ENBCS</td>
<td>Systematization of life stories and lessons learned from the GCF Result based payments project.</td>
<td>1,050,000</td>
<td></td>
</tr>
</tbody>
</table>

Strengthening of land use governance through improved planning and regulation

**System of Payments for Environmental Services strengthened**

RBPs will be invested in making the system for environmental services fully operational. This will include:

1. Simplifying and digitalizing processes to substantially diminish transaction costs for demand and supply actors.
2. Strengthening enforcement and monitoring.

**Measure 3: Promotion of environmental services, valuation of natural capital and of environmental services in all their modalities and procurement mechanisms.**

- Adjustment in regulations to Paraguay's National Policy on Environmental Services.
- Digitalization of the process for entering the system of environmental services.
- Development and implementation of a digital platform in INFONA for the determination of forest deficit linked to SIAM to establish the compensation through environmental services.
- Development of a digital platform for transactions of the Environmental Services Certificates.
- Promotion of adherence to the system of payments for environmental services and access to market for small producers.
- Development of mechanisms and assistance to indigenous communities for the commercialization of environmental services.

**Strengthening territorial governance in the areas of environment and forestry**

**Measure 8. Legal framework adaptation and policy articulation**

- Strengthening of municipal governance through territorial use planning and regulation mechanisms (support to Territorial Planning including establishment of biological corridors).

**Project lessons and results communicated.**

**Communication and knowledge management products**

- Applies to all actions of the ENBCS.
- Promotion and distribution of the results achieved in the implementation of ENBCS actions linked to the GCF Result based payments project.
- Systematization of life stories and lessons learned from the GCF Result based payments project.
### Governance and operational procedures of Climate Change Fund

- **Sub-total Output 1**
  - **Governance and operational procedures of Climate Change Fund**: Information dissemination and launching of the Climate Change Fund
  - **Regulation, implementation and operation of the Climate Change Fund**: Definition of rules of operation, safeguards requirements, participation modalities and decision making mechanism
  - **Capitalization of the Climate Change Fund**: Disbursements to the Climate Change Fund’s account
  - **Project monitoring and auditing**: Team of local/international experts verify the correct use of RBPs resources in the Climate Change Fund

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information dissemination and launching of the Climate Change Fund</td>
<td>26,100,000</td>
</tr>
<tr>
<td>Definition of rules of operation, safeguards requirements, participation modalities and decision making mechanism</td>
<td>320,000</td>
</tr>
<tr>
<td>Disbursements to the Climate Change Fund’s account</td>
<td>17,847,500</td>
</tr>
<tr>
<td>Team of local/international experts verify the correct use of RBPs resources in the Climate Change Fund</td>
<td>500,000</td>
</tr>
</tbody>
</table>

Total Sub-total Output 1: 44,767,500

### C.2.5. Implementation arrangements

List and describe the institutions involved in the activities that will be funded with proceeds from this pilot programme, and explain their anticipated roles and interactions with one another, including the flow of funds.

UNEP will be the Accredited Entity (AE) for this six-year project, as designated by Paraguay. The AE will be responsible for overseeing the implementation, financial management, evaluation, reporting and closure of the use of proceeds.

The national Executing Entity (NEE), will be Paraguay, represented by MADES. MADES will coordinate the national level execution of the project mainly through the Dirección de Cambio Climático (Directorate of Climate Change) and will be accountable to the AE for project execution and for the effective and efficient use of resources. Project implementation will follow UN Environment’s programme manual, policies, and operating procedures.

At the request of the Govt of Paraguay, and in line with the UN “Delivering as One” model, UNEP and specialized UN agencies (FAO, UNDP, and UNOPS) will also support project execution in line with their respective strengths. Specialized local organizations may also be contracted as necessary. All operating policies and procedures will follow the UNEP Programme Manual, which includes provisions for financial management and procurement[^12].

[^12]: The EE will be required to comply with UNEP rules, policies and procedures on procurement.
Further details on the Executing Entities provided below:

**MADES**
MADES will be responsible for involving key state organizations such as the National REDD+ Commission, National Forestry Institute (INFONA), INDI, INDER, and FAPI among others, and for requesting UNEP to execute activities with these organizations directly or through implementing partners such as FAO, UNDP, and UNOPS.

**Table 15: Organization, role and justification**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Role</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNOPS</td>
<td>Specialized agency in the provision of support services to projects</td>
<td>Agile and efficient administrative support in managing funds.</td>
</tr>
<tr>
<td>UNEP</td>
<td>Project implementation, final responsible for financial management and acquisitions executed directly or through agreements with partner organizations</td>
<td>Accredited entity to the GCF</td>
</tr>
<tr>
<td>MADEs</td>
<td>Responsible for involving key State organizations, coordination and leadership in the implementation of the ENBCS</td>
<td>National Executing Entity (EE)</td>
</tr>
<tr>
<td>INFONA</td>
<td>The Forest Monitoring System as the status of a Division within INFONA. Responsible for the enforcement of the forestry law</td>
<td>National Forest Authority of Paraguay</td>
</tr>
<tr>
<td>STP</td>
<td>Institutional link with the GCF. Responsible for consistency and sustainability of public policies in Paraguay</td>
<td>National Designated Authority (NDA) Responsible for monitoring the National Development Plan 2030 Urban and Territorial Land Planning Local Sustainable Development Plans</td>
</tr>
</tbody>
</table>

**UNEP**
As the AE, UNEP will be responsible for overseeing project implementation and evaluation in coordination with the Project Steering Committee (PSC) and the Project Management Unit (PMU). This includes, inter alia, M&E reports, a Mid-Term Review/Evaluation and a Final Evaluation. A UNEP Task Manager will be responsible for overseeing the project to ensure consistency with GCF and UNEP’s policies and procedures. The TM will formally participate in the following: a) annual meetings of the Project Steering Committee (PSC); b) interim and final evaluations; c) periodic progress reports and reviews of Project Implementation; and d) technical review of project deliverables.

UNEP will establish clear roles and responsibilities for the parties involved in the delivery of the proposed activities, the timing and conditions of the fees, the determination of the fiduciary rules and the terms and conditions for arbitration and termination of contracts. UNEP will sign implementation agreements with the Executing Entities as necessary to document the roles and responsibilities of each entity. UNEP will establish a Project Cooperation Agreement with UNOPS to receive administrative support.

**STP**
The Secretaría Tecnica de Planificación del Desarrollo Economico y Social (Secretary of Planning for Economic and Social Development), is the country’s NDA. Its function, exercised through participation in the Project Steering Committee, is to oversee the submission of applications for GCF support on behalf of the Government.
of Paraguay, and to ensure that GCF project activities are well coordinated and in line with national priorities as stated in the PND 2030.

**Project Steering Committee - PSC**
The PSC will be comprised of representatives of the NEE (MADES), AE (UNEP), and NDA (STP), as well as representatives of, among others: INFONA, an indigenous people’s representative, and the Ministry of Agriculture and Livestock (MAG). The PSC will be co-chaired by the Minister of MADES and UNEP. The PSC will provide project oversight and strategic direction, including a) supervision of project implementation; and b) review of annual work plans and project reports, including approval of any changes in project objectives, activities or timelines.

**Task Manager (PM)**
The Task Manager (TM) will be responsible for project supervision to ensure consistency with GCF and UNEP policies and procedures, and participate in: i) annual PSC meetings; ii) the facilitation of the Mid-Term and Final Evaluations; iii) the preparation of Annual Performance Reports and relevant documentation; and iv) technical reviews of project outputs.

**National Project Coordinator**
The project will have a national project coordinator. She/he will: a) alert the PSC members of any relevant information and/or development; b) Communicate the PSC’s strategic decisions to the PMU; c) ensure that project execution is within budget, and carried out in accordance with work plans and guidelines of the GCF and UNEP; d) be responsible for maintaining a smooth relationship with UNOPS to ensure financial management and disbursements, with accountability to the Government of Paraguay, and UNEP; and e) work closely with national and local authorities, as well as FAO, UNDP, and NGOs to effectively manage the local level actions of the project.

**UNOPS**
UNOPS will provide UNEP with administrative support during the duration of the project. UNEP will sign an agreement with UNOPS to transfer funds to be executed by the PMU and specialized UN agencies (FAO and UNDP) and any organization identified by the PSC through the legal figure deemed most appropriate. However, if the PSC considers it more effective, UNEP may also sign agreements with any of these organizations through its cooperation instruments (UN-to-UN agreement, PCA, SSFA or others).

**Project Management Unit (PMU)**
The PMU will be comprised of a National Project Coordinator (PC), a Gender Specialist, a Finance Specialist, a Safeguards Specialist, a Communication and Knowledge Management Specialist, an operation officer and an Administrative Officer. The PMU will coordinate activities between AE, EEs, and various partners to oversee the implementation of project activities.

The project implementation arrangements are summarized in the diagram below:
Figure 6: Management Arrangements

Roles in the Project Management Unit (PMU)
The Project Coordinator will: a) lead the PMU; b) oversee the day-to-day responsibilities of the PMU team; c) provide administrative and technical expertise; and d) serve as a focal point for project stakeholders and partner organizations (FAO, UNDP, government departments, NGOs, civil society groups); and d) coordinate periodic implementation reports. The PC will be employed by the project on a full-time basis.

The Gender and Participation Specialist will be responsible for designing and implementing the project’s gender strategy, and for identifying actions to reduce gender gaps in all interventions related to the implementation of project activities.

The Safeguards Specialist will be responsible for supporting the consolidation, updating and improvement of the Safeguard Information Systems, as well as monitoring and reporting of compliance with safeguards during the implementation and the project. The specialist is also responsible for hiring of temporary support personnel for the fulfilment of the project’s commitments on safeguards.

The financial specialist will provide support on all financial matters including designing financial products that the funds will make available to beneficiaries. It will be responsible for developing selection criteria for the approval of disbursements and for creating a system for monitoring the performance and impact of disbursed funds. The specialist is also responsible for hiring temporary support staff to meet the project's funding commitments.

The Communication and Knowledge Management specialist will be responsible for developing and implementing a communications campaign aimed at influencing behavioural changes among population towards forest conservation. The specialist must also ensure the visibility and recognition of all partners and donors in the communication activities of the project. The specialist will also generate a strategy for systematizing and managing the knowledge generated during project implementation and for communicating it effectively to all relevant stakeholders.

The PMU will actively seek to engage, through cooperation agreements, NGO and private sector partners for the implementation of demonstration pilots of REDD+ actions.
The PMU will also include two full-time officers, an Administration and Finance Officer (AFO) and a Procurement Officer (PO). These officers will provide administrative, logistical and financial support and expertise to the PMU. The officers will be under the direct supervision of the PC. The responsibilities of AFO and PO will be focused on ensuring that all financial and administrative matters, including the procurement of non-expendable equipment and infrastructure, are carried out in line with UNEP standard procedures. The AFO will be responsible for managing financial transactions related to project outputs and activities to be delivered according to the established work plan, while PO will be responsible for overseeing the transparent, timely and cost-effective hiring of consultants, service providers and purchase of equipment for the project.

Roles in Environmental & Social Management Framework (ESMF) implementation

MADES
- With UNEP support, systematize information on how REDD+ safeguards are addressed and respected during ENBCS (and project) implementation through operations and stepwise upgrades of the SIS.
- Reporting overall safeguards performance, throughout ENBCS implementation, via the national-level SIS and periodic submission of stakeholder-validated summaries of information to the UNFCCC.
- Institutional uptake and promulgation of good practices and lessons learnt regarding ESMF implementation, supported by the PMU’s Communication and Knowledge Management Specialist.
- Through the PSC, ensure annual quality assurance checks of ESMF implementation to evaluate strengths and weaknesses and to inform improved project management.

PMU
- Overall responsibility for ESMF implementation, monitoring and revision under the immediate supervision of the Safeguards Specialist.
- Together with relevant stakeholders, apply environmental and social risk mitigation measures and integration of risk mitigation monitoring into the overall monitoring and reporting framework of the project.
- Develop and execute project activity specific environmental and social impact assessments, through procurement of consultants overseen by the Safeguards Specialist, prior to activity implementation.
- Develop and execute safeguards management (gender action, indigenous peoples, resettlement, stakeholder engagement, etc.) plans led by the Gender and Participation and Safeguards specialists.
- Design, operate and refine project-level grievance redress procedures and processes, linked to existing national and subnational grievance redress mechanisms led by the Gender and Participation Specialists.
- Biannual review and annual reporting to the Project Steering Committee on ESMF (including constituent safeguards management plan) implementation progress, strengths, weaknesses and lessons learnt.
- Ensuring full and effective participation of stakeholders, particularly indigenous peoples and local communities, throughout ESMF implementation, monitoring and revision.
- Allocating adequate budget for ESMF (including constituent safeguards management plan) implementation, monitoring and revision, together with any necessary institutional capacity building.

UNEP
- Task Manager-led quality control oversight of ESMF implementation, monitoring and revision, as part of overall AE responsibilities, through participation in the PSC and PMU.
- Provision of technical assistance backstopping to PMU-led ESMF implementation, monitoring and revision.

Note that project activity specific environmental and social impact assessments, and resultant safeguards management plans may require changes and further clarifications to the roles and responsibilities of participating project organisations and individual staff involved in the implementation, evaluation and monitoring of the ESMF. Such changes will integrated as part of the participatory decision making and implementation proceedings of the project.

All project personnel, subcontractors and partners will attend an ESMF induction that covers requirements of relevant safeguards management plans so that they are aware of the environmental and social requirements for project implementation.

Further information is provided in the ESMF, which is included as an Annex to this proposal.

Collaborating Partners
C.2.6. Non-carbon benefits:

Paraguay, with the support of the UN-REDD Programme and UN Environment, undertook a series of studies and spatial analyses between 2011-2016 to integrate non-carbon benefits into REDD+. As a result of these analyses, areas were identified in which REDD+ actions could provide social and environmental benefits. The analyses also identified areas under threat of deforestation. This information provided guidance for the development of the ENBCS and for REDD+ implementation, as well as for the design and implementation of specific REDD+ actions. The studies include the following:

- Mapping of multiple benefits of REDD+ in Paraguay: the use of spatial information to support land-use planning (Mapeo de los beneficios múltiples de REDD+ en Paraguay: utilización de la información espacial para apoyar la planificación del uso de la tierra): This report identifies areas with potential to provide multiple benefits through REDD+ as well as areas under deforestation pressure. Benefits assessed were prioritized by national stakeholders, and include biodiversity conservation; protection of water and soil resources; and support for local livelihoods; and

- Mapping of multiple benefits of REDD+ in Paraguay: additional analyses to support decision-making about REDD+ policies and measures (Mapeo de los beneficios múltiples de REDD+ en Paraguay: análisis adicionales para orientar la toma de decisiones sobre políticas y medidas REDD+): A study developed to further the integration of multiple benefits into REDD+ planning in Paraguay. An additional series of spatial analyses and a monetary valuation exercise were carried out, based on a set of benefits not previously considered. The benefits assessed were prioritized by national stakeholders as being of interest for REDD+ implementation in Paraguay.

The implementation of REDD+ actions in Paraguay offers significant potential for the provision of non-carbon benefits. The provision of such benefits is explicitly considered in a number of policies and measures included in the Estrategia Nacional de Bosques para el Crecimiento Sostenible (ENBCS).

For example, one of the strategic measures considered in the ENBCS aims to enhance the value of environmental services provided by forests, through the effective functioning of the Environmental Services Regime (Law 3001/06) on the Valuation and Compensation of Environmental Services. In this regard, the extension of forest areas included in the Environmental Services Regime has increased considerably from 2015 to 2018, as shown in the table below.

### Table 16. Area included in the Environmental Services Regime, from 2015-2018 (ha)

<table>
<thead>
<tr>
<th>Modality</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest</td>
<td>3,483</td>
<td>81,784</td>
<td>79,547</td>
<td>30,763</td>
<td>195,577</td>
</tr>
</tbody>
</table>

This measure has the potential to significantly contribute to the provision of key environmental services, such as the conservation of biodiversity, the control of water- or wind-induced erosion, and the control of soil salinization, among others. The benefits related to biodiversity conservation would be particularly important considering the level of threat affecting the country’s forest ecosystems.
Paraguay is a highly biodiverse country. It represents an ecotone for its central position in South America, which provides the country with a mosaic of ecosystems.\textsuperscript{13} Although Paraguay lacks a complete inventory of flora and fauna species present in the country, it is estimated that there are 182 species of mammals, of which 39 are endangered; 715 species of birds, of which 112 are endangered; 178 species of reptiles, of which 41 are endangered; 85 species of amphibians, of which 15 are endangered; and 476 species of fish, of which 18 are endangered. Regarding flora, there is an estimated number of species between 8,000 and 13,000, of which 4,490 are registered, and 121 threatened species.

The country is also home to an important part of two of the most threatened ecoregions in the world due to habitat conversion: the Gran Chaco Americano and the Bosque Atlántico.

The dry tropical forest of the Gran Chaco Americano, which is shared by Argentina, Bolivia, Brazil, and Paraguay, is one of the most important deforestation hotspots worldwide, largely due to the transformation of natural habitats into crops and pastures. Results of a recent study suggest that the current network of protected areas of the Gran Chaco would be insufficient to ensure the survival of a large number of endemic terrestrial vertebrates, so the implementation of measures aimed at maintaining and expanding the forest area under some form of protection would have a very positive impact.\textsuperscript{14} These measures include an increase in the area of land under the scheme outlined in the Law 3001/06 of Environmental Services and the creation of Private Protected Wildlife Areas under Law 352 of Protected Wildlife Areas (SINASIP), as well as the Plan Nacional de Reforestación del Paraguay (National Reforestation Plan of Paraguay), which can help to diminish the pressure on native forests. Figure 7 shows critical areas for biodiversity conservation in the Paraguayan Chaco (considering endemic species of amphibians, mammals and birds, areas of interest for habitat diversity, fragile ecosystems and ecological corridors) at risk of future deforestation.

The Bosque Atlántico of Paraguay, located in the eastern part of the country, is one of the 15 ecoregions of the Bosque Atlántico's ecoregional complex, also present in Brazil and Argentina. This ecoregion is recognized as one of the world's biodiversity "hot spots".\textsuperscript{15} Only 13\% of the original forests remain, mostly in a highly fragmented and degraded state. The loss of forests has been caused mainly by the conversion of forests for agricultural development. It was first converted for livestock development, and in recent decades for the advancement of mechanized agriculture, mainly for soybean production.

Figure 7: Areas in the Chaco region at risk of future deforestation. Areas with high importance for biodiversity conservation and at high risk of future deforestation are shown in dark red.


There are several measures in the ENBCS with significant potential to contribute to the conservation of the biodiversity associated with this ecoregion. Among them, the protection of the forest remnants of the eastern region, considering the current validity of Law 6256/18 that prohibits the transformation and conversion of areas with forest cover in the eastern region, in place until 2020, the promotion of ecological connectivity actions in those forest remnants and/or forest restoration actions.

Another important non-carbon benefit that could result from the implementation of measures considered in the ENBCS would be the mitigation of soil erosion. Forests in the eastern region play an important role in controlling water-induced soil erosion, due to the high levels of precipitation and presence of slopes. In this area, deforestation and degradation of forested slopes can decrease the soil's capacity to store water, thus increasing surface runoff after heavy rains. This leads to increased erosion and sedimentation, increasing the risk of flooding downstream and leading to water scarcity at during drier seasons in the year.

Soil particles carried by runoff contribute to increased presence of sediments in streams and rivers, which can result in sediment accumulation contributing to damage downstream infrastructure such as hydroelectric dams.

This is particularly relevant for the operation of the Itaipu dam, the world's largest hydroelectric power facility, jointly owned by the governments of Paraguay and Brazil, which generates 72.5% of Paraguay's electricity supply. The importance of protecting the natural forest next to the Itaipu reservoir is recognized. There are seven protected areas adjacent to its banks in Paraguay, and the Corporación Itaipu Binacional undertakes soil conservation efforts as part of its watershed management programs. Figure 8 shows the watersheds where forests play a more important role in providing this service.

The Chaco region is much more vulnerable to wind-induced erosion. This type of erosion is a key factor of soil degradation processes in arid and semi-arid zones. The increased conversion of forests for agricultural purposes in the Chaco, based on practices developed for humid ecosystems, have caused soil degradation by
Due to the key role that forests play in controlling wind-induced soil erosion, REDD+ actions can contribute to soil conservation in susceptible areas. Figure 9 shows the most important forests for the control of wind-induced soil erosion. The northeast of the Chaco is particularly prone to wind-induced soil erosion, emphasizing the role of dry forests in protecting the arid soils of the region.

**Figure 8**: Importance of forests in controlling soil loss due to water-induced erosion. **Figure 9**: Importance of forests in controlling wind erosion.


Forests in the Chaco region can also play an important role in controlling soil salinization and increases in groundwater levels, playing a key role in controlling water balance and salt distribution. The extreme low slopes of this area may hinder the evacuation of surface water and salts. This means that excess water in these areas often results in flooding and salinization due to the rise groundwater levels. In these areas, the transformation from forest to herbaceous vegetation usually causes an increase in the water balance which, as it seeps into the subsoil, causes the rise of groundwater and the transport of salts to the surface. This process can have serious consequences for agricultural and livestock productivity. It is therefore a key benefit that REDD+ implementation can provide in the Chaco.

In addition to the environmental benefits mentioned above, Paraguay also aims to enhance social benefits by promoting "rural development and poverty reduction through the diversification of productive activities." This would indirectly reduce pressure on forests. In the same manner, many of the strategic measures for REDD+ implementation in the country have an explicit aim to reinforce "the role of local communities and indigenous peoples" in REDD+.

While urban poverty has declined in recent years, more than one third of Paraguay's rural population still lives in poverty, with women and indigenous peoples being disproportionately affected. Remote rural areas in Paraguay suffer from limited access to markets, weak infrastructure and few opportunities for agricultural production.

In areas with high forest cover and high poverty rates, there tends to be a relatively high dependence of communities on forests for their livelihoods, especially in adverse economic situations. REDD+ PAMs,


designed with the participation of local stakeholders and communities, can benefit local livelihoods by helping to clarify and strengthen land tenure rights, increasing community capacity for forest management, and by maintaining ecosystem services important for both food security and climate change adaptation.

The percentage of the population below the poverty line decreased by 2.2% from 2015 to 2018. In rural areas, this decrease was even more pronounced, from 37.7% to 34.6% (Figure 10). REDD+ policies and measures in the ENBCS have the potential to enhance the livelihoods of rural populations, including indigenous communities, and to support the development and implementation of sustainable production systems. Specific measures include:

- Diversify income sources and sustainable production systems, including through the use of multiple benefits from forests;
- Facilitate access for local communities and women's groups to formal credit systems for the adoption of better production technologies that can contribute emissions reductions;
- Strengthen the market for differentiated products from forests;
- Promote energy efficiency programs in local and indigenous communities, focused on the domestic use of firewood from the native forest, and highlighting the role of women;
- Develop and incentivize production processes through the implementation of agroforestry, silvopastoral, and forest management models; and
- Prioritize payment for environmental services in indigenous communities.

![Figure 10: Poverty rates in Paraguay from 2013-2018.](https://www.dgeec.gov.py/)

In addition to the benefits described above, in terms of poverty reduction, empowerment of indigenous communities and addressing the gender gap, REDD+ implementation also has the potential to enhance forest governance. The following are particularly relevant:

- Improving the management of the cadastral system, including legalizing and consolidating statistical data on lands distributed under the Agrarian Reform policies, for the preservation of forested areas and their sustainable management.
- Strengthen the mapping and monitoring systems for areas certified under the Environmental Services regime.

18 Dirección General de Estadística, Encuestas y Censos, [https://www.dgeec.gov.py/](https://www.dgeec.gov.py/)
• Strengthen satellite monitoring, inspection, and control systems through allocating the necessary resources to operationalize them.
• Promote the implementation of land and environmental management plans at the municipal level.

D. Investment Framework

Describe in this section how the proposed REDD-plus results-based programme aligns with each of the criteria of the Investment Framework for the activities that lead to the achieved results for the full period over which the results being submitted in this proposal were achieved.

D.1. Impact potential

Describe the potential of the programme to contribute to the achievement of the Fund’s objectives and results areas.

The “Land-Use, Land-Use Change and Forestry” (LULUCF) sector has historically been the main source of greenhouse gas emissions in Paraguay. It was only from 2014 onwards that the sector clearly moved to second place after agriculture. In 2015, the Second Biennial Update Report on Climate Change (BUR 2) quantified LULUCF emissions at a rate of 31%, behind those generated by the agricultural sector estimated at 53%.

Figure 11: INGEI 2015 – Emissions by sector

The calculation of the CO₂e emissions reduction from gross deforestation in Paraguay for the period 2015-2017 was done by applying the same methodology used for the elaboration of the forest reference emission level (FREL) for the period 2000-2015. This was assessed by a technical group of experts in accordance with the United Nations Framework Convention on Climate Change guidelines.

According to these calculations, emissions for the period 2000-2015 were on average 58.7 million tons of CO₂e/year. For the period 2015-2016-2017, emissions reached 45.3 million tons of CO₂e. The avoided emissions totaled 26.7 million tons of CO₂e.

Figure 12: Emissions from avoided deforestation - Paraguay
Figure 12 shows the dynamics of avoided emissions in Paraguay for the reporting period 2015-2016-2017. However, it is from 2013-2014 that emissions from deforestation started to show a decline, which was accentuated in the subsequent period. At the time this proposal is being developed, there is no study available on the causes of this decrease in deforestation. However, there are indications that a number of policies started to have an effect on land use change. There was an increase in the monitoring capacities of INFONA and MADES. The UNREDD Programme, and later the FCPF, supported the national forest monitoring system. INFONA increased its enforcement of the forestry law and started to formally notify landholders on breaches to the legally required minimum forest area. The Zero Deforestation Law received successive extensions. In the period 2015-2018 the Directorate of Integrated Environmental Auditing carried out 183 auditing and intervention procedures related to deforestation, changes in land use, selective extraction of trees and others. These followed citizen complaints, requests from tax offices, and requests for support from institutions and ex officio verifications. All these interventions took place with MADES as the enforcement authority. Law 5284 on the free access by citizens to public information and governmental transparency facilitated participation of civil society. In parallel, MADES advanced with the implementation of Law 3001/06 that established a system of payments for environmental services that provides incentives to landowners for the conservation of forest cover. More than half a million hectares received environmental certificates. NGOs also provided technical and financial support for the certification of areas. The combination of these actions gradually started to have an effect on deforestation rates.

In 2017 however, there was a significant spike in deforestation. As mentioned before, there is no causality analysis that can identify the contribution of different variables to changes in deforestation rates. One potential contributor was that the length of the measurement period in 2015-2016 was shorter than 2016-2017. This did not have an effect on overall deforestation since the sum of both periods still equaled 2 years. During the period of the increase in the deforestation rate there was also a jump in cattle production though it is not clear how much of this difference followed forest clearance for additional land. There is also a correlation between the increase in deforestation and expectations about changes to the Forestry Law that took place by the end of the previous administration. Decree No. 7702/17, adopted in September 2017 modified the article 42 of the Forestry Law and created a legal loophole that enabled the deforestation of forest reserves. This decree had a negative effect on land-use change in Paraguay.

However, the reaction of the public and civil society organizations was strongly against this change. Paraguay’s current administration abolished Decree No. 7702/17, closing the window of opportunity created for deforestation, which had openly contradicted the environmental goals of both MADES and INFONA. The robust reaction of the public and civil society gives reasons to believe a reversal of this policy may not take place.

Finally, existing policies combined with the abolishment of Decree 7702/17 appear to be having the desired effects. Preliminary data indicate that deforestation levels are again declining and reaching the 2015-2016 average.

D.2. Paradigm shift potential
Describe the degree to which the REDD-plus activity catalysed impact beyond a one-off programme investment.

The potential for results-based payments to generate a paradigm shift in Paraguay is substantial, largely due to two main reasons: the first one is that results-based payments confirm the idea that the environmental sector is capable of generating significant economic resources in addition to those benefits achieved by protecting the environment. This argument is strategic in Paraguay's current political debate, where important actors still tend to see the environment as a cost rather than as an investment.

The second reason is that the access to result-based payments has the potential to create a "before and after" effect in Paraguay's environmental policy, facilitating the creation of "virtuous circles", where the decrease in deforestation rates opens the possibility of accessing new payments both from multilateral and private sources (carbon markets), which would be invested in the environmental management system, promoting additional decreases in deforestation and thereby allowing continued access to payments. We envision that the lines of support from the Climate Fund will include the co-financing of investments by private sector, as a mean to leverage the impact of its funds.

The result-based payments obtained as a result of this proposal would be invested to finance the implementation of the ENBCS. The ENBCS includes a comprehensive list of actions intended to address direct and indirect causes of forest loss, barriers to change and legal/regulatory framework. As mentioned earlier in this document, the ENBCS is the result of an extensive participatory process of socialization and consultations with key stakeholders in which 306 representatives participated, 46% of which women, from the public and private sectors, indigenous peoples, producer organizations, academia, the financial sector, and civil society. The ENBCS is based on the framework of the development processes proposed by the National Development Plan 2030 and in accordance with the National Environmental Policy, the National Climate Change Policy, the National Climate Change Mitigation Plan, the National Forestry Policy, the Agrarian Strategic Framework and the National Energy Policy.

The ENBCS development was led by the Secretariat of the Environment (SEAM), now MADES, INFONA, FAPI, and INDI. This proposal has a national scope and is closely related to the goals and objectives of the institutions involved in national development, both in the public and private sector, as well as in the business productive sector, agricultural organizations and institutions representing indigenous peoples.

The actions listed in the ENBCS are already showing impact through a decreased deforestation rate. The result-based payments from this proposal will be key to strengthen the trend of decreasing deforestation. The priority actions for the use of the resources include, among others, the following:

- Strengthening of the Protected Areas System (both public and private areas);
- Auditing and effective enforcement of the forestry and environmental legal framework, including the application of penalties;
- Full implementation of Law 3001 on Valoración y Retribución de los Servicios Ambientales (Payments for Environmental Services);
- Strengthening of the Environmental and Forestry Information System (monitoring system);
- Support for implementing land-use planning;
- Implementation of the Environmental and Social Management Framework;
- Strengthening of environmental and forestry management capacities;
- Engagement and development of sustainable economic alternatives for local actors;
- Knowledge management and knowledge sharing; and
- Contributing to the Climate Change Fund for actions that will ensure carbon and non-carbon benefits.

These will be key actions to achieve targets in the country’s Nationally Determined Contributions (NDC). The targets proposed by Paraguay in 2015 are a 20% reduction in emissions in comparison to those the year 2000. This target is made up of 50% conditional and 50% unconditional international contributions. If it is taken into account that the net greenhouse gas (GHG) emissions for the year 2000 were slightly below 60 million tons, the average annual reductions for the period 2015-2017, estimated at 13.3 million tons, would, if maintained over time, make significant contributions to the NDC targets.

Paraguay is in the process of developing its NDC Implementation Plan, which includes several measures from the ENBCS as key elements for the process of reducing GHG emissions by 2030. In this sense, the ENBCS represents a guiding document for the management of policies, actions and measures which will contribute to the implementation of the NDCs presented by the country to the international community, within the scope of the Paris Agreement.
### D.3. Sustainable development potential

*Describe the wider benefits and priorities, including environmental, social and economic.*

This project will have a direct contribution to Sustainable Development Goals #13 and #15 and indirectly to #1. The implementation of the ENBCS aims to mitigate climate change in the LULUCF sector, reduce deforestation and forest degradation, increase the sustainable use of forests through strengthening of natural resources management and management by indigenous peoples, and promote sustainable agricultural production through sustainable resource management. The full implementation of Law 30010/6 will establish a market for Environmental Services Certificates that will also support mitigation in the LULUCF sector by adding value to forest conservation. The implementation of these instruments will deliver several sustainable development co-benefits. These have been described in section C.2.6. A summary is included below.

#### Contribution to SDGs #13 and #15

The project will support local communities focused on fostering the adoption of improved production technologies for reducing emissions; strengthening differentiated markets for forest products; and developing and incentivizing agroforestry, silvopastoral, and sustainable management of forests. Amongst the key environmental benefits are the conservation of biological corridors which are critical for maintaining connectivity between natural protected areas; reduction of water-induced soil erosion that could contribute to losses in agricultural productivity as well as in hydroelectric energy production; and soil conservation through the prevention of wind erosion. Forest conservation in the Chaco region is also critical for controlling both soil salinization and rises in groundwater levels, which are important for maintaining high agricultural and livestock productivity in adjacent agricultural lands.

#### Contribution towards SDGs #1

The ENBCS PAMs and activities funded through the proposal will contribute to improving the livelihoods of forest dependent communities; strengthening land tenure rights; and increasing the ability of forest communities to manage forests and their ecosystem services. The full implementation of the activities outlined in the ENBCS, supported by the results-based payments to be received by Paraguay, will also promote sustainable rural development and reduce poverty through the diversification of productive activities and through strengthening the role of local communities and indigenous peoples in the process.

These activities are also expected to contribute to reinforce poverty reduction trends in the rural sector, which included 34.6% of the population under the poverty line in 2018, falling 2.2% from 37.7% in 2015.20

#### Contribution to gender equality

The implementation of the ENBCS will also contribute to addressing gender gaps in the environmental and rural sectors and contributes to meeting the objectives outlined in the National Gender and Climate Change Strategy (ENGCC, in Spanish). The ENBCS aims to reduce gender gaps by ensuring the participation of women in all the spheres of decision making related to forests, considering the differentiated roles related to forests and dependency over forest resources between men and women; and by aiming to ensure equal access to services like forest related education, credit and also to land.

### D.4. Needs of the recipient

*Describe the vulnerability and financing needs of the beneficiary country and population.*

Increased global demand for commodities, and particularly for beef, soy, and soy derivatives (constituting circa 50% of the country's total merchandise exports, and with the agriculture sector representing close to 20% of value added as percentage of the country’s GDP21) can contribute to exert further pressure on existing forested areas to be cleared for agricultural and livestock development. Land that remains forest and is not transformed

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for farming or agricultural purposes is often perceived as being idle capital on which property taxes are paid, obtaining no benefits in return. Therefore, the opportunity costs of conserved forests are perceived as high.

Given this context, significant investments are required to stabilize and further reduce the rates of deforestation and associated emissions in Paraguay. The institutional and regulatory framework is in need of strengthening to implement the policies and measures outlined in the ENBCS that adequately address deforestation. Relevant institutions have limited staff and capacities to be able to fully carry out their mandated functions and a very limited budget to implement them. There is a heavy budgetary reliance on fines and licenses (over 60% of total budget, with only 40% coming from the central government). Increases in budget allocation to MADES and INFONA, circa 0.12% of allocations within the government’s 2019 financial plan, are required to ensure compliance with environmental legislation and to enhance supervision of compliance with environmental and forest permits. Climate finance can thus play a key role in supporting the country to address the institutional gaps at MADES and INFONA and the existing regulatory gaps to effectively address deforestation through the implementation of the ENBCS.

In addition, with support from the results-based payments, the country will operationalize and overcome the current limitations of the Law 3001/06 and enable the market for Environmental Services Certificates to fully operate. This will contribute to change individuals’ perceptions through the provision of incentives that can make a clear case that transforming forests for agriculture and livestock development are not the only options for revenue generation, thus ensuring that forests can be a source of sustainable wealth and livelihoods.

D.5. Country ownership

Describe the beneficiary country ownership of, and capacity to implement a funded project or programme (policies, climate strategies and institutions).

The funding proposal has been developed in close collaboration with MADES and INFONA and in close consultation with the country’s NDA, the Secretaria Tecnica de Planificación del Desarrollo Económico y Social (STP). As such, this project has full country ownership. The project is aligned with and will support Paraguay’s Plan Nacional de Desarrollo 2030 (PND 2030), the NDC, the National Climate Change Policy, and ENBCS.

In 2011, the country started its REDD+ readiness phase to develop and strengthen national capacities for REDD+ through ODA and national initiatives. In 2014, Paraguay approved its National Development Plan after a participatory process and a series of intersectoral dialogues. The Plan provides a framework in which the development of a national REDD+ strategy, as one of the requirements of the UNFCCC Warsaw framework, was possible. In 2018, Paraguay presented its ENBCS, following extensive stakeholder consultations with public and private actors, indigenous groups, farmer organizations, academia, finance sector and civil society.

The use of proceeds from this results-based payment funding proposal will support the implementation of the ENBCS’s strategic measures. MADES and UN Environment will implement this project.

D.6. Efficiency and effectiveness

Describe the economic and, if appropriate, financial soundness of the programme.

Reducing Emissions from Deforestation and Forest Degradation, the role of conservation, forest sustainable management and increasing forest carbon stocks are the REDD+ activities that aim at mitigating climate change through result-based payments in developing countries. These result-based payments aim to support reducing emissions from deforestation and forest degradation as well as conserving, managing and increasing forest carbon stocks. Economic analyses for Paraguay indicate that deforestation policies based on result-based payments can be economically efficient and effective.

The UN-REDD Programme carried out an analysis of Paraguay’s main land-use changes linked to deforestation and forest degradation, carbon losses and gains, opportunity costs and associated benefits.
The analysis included synergies between REDD+ and Law 3001/06 on Payments for Environmental Services (Valoración y Retribución de los Servicios Ambientales), which is part of the ENBCS to be financed by results-based payments. The analysis covered Paraguay's entire territory.

At current forest carbon prices (5 USD/tnCO2eq), result-based payments can cover the opportunity costs of 61% of deforestation emissions. With the carbon price at USD 7/TnCO2eq, the coverage of opportunity costs rises to 81%.

The territorial distribution of this reduction is mostly concentrated in the Chaco region, where most important deforestation processes take place. The main driver of deforestation in the Chaco is the establishment of extensive farms for livestock breeding and presents opportunity costs between 3.09 and 3.11 USD/tnCO2eq. These results are below current carbon prices and leave some margin for accommodating variations in farm costs, benefits, exchange rates and carbon content present in the farms.

The social and environmental benefits of forest conservation, as well as the social and environmental costs associated with forest loss, are not included in the above-mentioned numbers. Including these benefits would make the implementation of a REDD+ mechanism even more appealing from a public perspective.

To date, economic analyses have revealed the importance of combining REDD+ results-based payments with a full implementation of Law 3001/06 on Valoración y Retribución de los Servicios Ambientales. The implementation REDD+, which includes implementation of the the Law, can be a fundamental tool in the efforts of decreasing deforestation. A combination of payments for REDD+ and for Environmental Service Certificates could result in competitive incentives for almost all of Paraguay’s types of agricultural activities, with exception of high-yield soybean farms located in the country's eastern region. However, it should be noted that these types of activities have a lower participation in current deforestation processes and that the eastern region is subject to the Zero Deforestation Law.

It is worth noting that the economic analysis also mentions that the effectiveness of this type of combined policies depends on the government's capacity to monitor and audit current laws, particularly the Forestry Law and the Zero Deforestation Law for Paraguay's eastern region.

Without such capacities, the effectiveness of a REDD+ implementation decreases significantly. For this reason, investing in the implementation of the ENBCS has the potential of significantly increasing the effectiveness and impact of result-based payments in Paraguay. The prioritized measures include increased monitoring capacities, real-time and early warning alerts, supervision of compliance with the Forestry Law, and territorial planning, among others.

Finally, the mechanisms for allocating result-based payments and implementing measures have been defined by strict cost-efficiency criteria. A significant part of the resources will be channelled through the Climate Change Fund while the other part will be channelled through agencies and institutions demonstrating comparative advantages for the implementation of the different prioritized actions while at the same time minimizing direct and indirect costs.

E. Compliance with GCF policies
Describe how the REDD-plus results-based programme that generated the results submitted in this proposal or will be supported with the proceeds earned by them aligns with GCF policies for the activities that led to the achieved results and for the use of proceeds.

E.1. Environmental and social safeguards
E.1.1. For the period of the achieved results
Summarize the main findings of the environmental and social assessment (ESA) report describing the extent to which the measures undertaken to identify, assess, and manage environmental and social risks and impacts, in the context of the REDD-plus proposal, were consistent with the requirements of the applicable GCF ESS standards. This supplements information about the country’s own assessment as to how the Cancun safeguards were addressed and respected in the REDD-plus activities.

Based on the review of elements of the country’s legal framework, results analyses of potential risks and benefits related to REDD+, measures related to stakeholder participation, and grievance management, a set of verification instruments for the application of safeguards and adequate risk management were compiled.

During the REDD+ readiness phase, supported by the UN-REDD National Programme, the country carried out several exercises to identify the potential risks and benefits associated with REDD+ implementation. The
results of the risk assessments may be found in the Environmental and Social Assessment document, which is included as an Annex to this Full Proposal package. These informed the implementation of measures and actions in the period 2015-2017.

There is evidence of adaptive management, that responds to shifting national circumstances and needs, such as in the application of Law 2524/04 prohibiting forest transformation activities and the conversion of forest areas in the Eastern Region. This law experienced several extensions in response to an underlying risk of deforestation throughout this region. There are several laws, regulations, and measures that were implemented to avoid, minimize or mitigate risks according to their importance.

The review of the risk identification processes indicates that there were recurring concerns, most of them of social nature. These included the lack of protection of indigenous peoples’ rights and culture; problems related to land tenure and land titling; poor intra- and inter-institutional coordination and capacities; and lack of territorial planning. The following environmental risks are highlighted: displacement of deforestation (and deforestation pressures) to other areas, wildfires, and the advance of the agricultural frontier. The identification of these risks has helped to shape the definition of the policies and measures (PAMs) that currently constitute the ENBCS.

The existence of a solid and broad legal basis for addressing and respecting REDD+ safeguards was identified, as well as for applying the UN Environment Safeguards Framework, which is aligned with the safeguards standards defined by the Green Climate Fund. It is worth noting that the development of the ENBCS and the design of specific policies, actions, and measures for the implementation of REDD+ in the country have built on collective construction processes, with a clear gender approach and effective participation of key actors, emphasizing the participation of indigenous peoples.

Platforms have been established for requesting and accessing information, filing complaints, and promoting transparency. Over the past few years, the country has allocated resources to promote transparency and institutional strengthening for the application of the legal framework, based on efficient administrative, financial and technical processes that contribute to sustainable development. In that sense, information related to the prohibited practices policy of the Green Climate Fund was also analyzed. Paraguay’s strong commitment to fight against corruption, promote access to information, and to control and sanction illegal acts was identified. The implementation of initiatives, programmes, and projects during the analyzed period 2015-2017 has been consistent with the requirements of applicable standards and safeguard policies and has not been related to practices that go against the Green Climate Fund zero-risk tolerance.

The Environmental and Social Assessment carried out indicates that the country has strong legal instruments, which provide broad support to the individual and collective rights, through which they seek to minimize the negative impacts of actions in the territory, while at the same time contributing to sustainable development. Resources were invested in the implementation of complementary measures and actions. The reported elements demonstrate that the results obtained from reducing deforestation were achieved through the implementation of laws, policies, actions, and measures that considered criteria for risk mitigation and application of safeguards.

E.1.2. For the use of proceeds

Provide adequate and sufficient information describing how environmental and social risks and impacts will be identified, screened, assessed and managed in a manner consistent with the GCF’s ESS standards, including the determination of the relevant environmental and social risk category of the proposed activities and the appropriate environmental and social assessment tools and management plans.

The Accredited Entity, UNEP, has extensive experience in the management and implementation of environmental projects. Its participation in the UN-REDD Programme and the leadership it has demonstrated in recent years in the field of safeguards has placed it in a strong position to carry out the processes of risks identification, management, and monitoring, as well as actions to address and apply safeguards in an adequate and transparent manner.

The AE’s mandate and its Environmental, Social and Economic Sustainability Framework (ESES) guide its actions towards the generation of sustainable alternatives that enable the conservation, management and sustainable use of forest resources while generating opportunities for local communities and key populations. In this context, the identified and executed actions will be analyzed based on the environmental-social-economic connection and its contribution to sustainability.

The above-mentioned ESES Framework will apply safeguard standards with the aim of anticipating and managing environmental, social and economic problems in a holistic way. This is a requirement for any executing partner or contributor. The due diligence process to be applied for the activities financed by the use of proceeds, embodied in the ESES procedures, can be summarised as follows (see UNEP ESES Framework, Chapter 3 for details):
- Environmental, social and economic screening (or scoping), using a Environmental, Social and Economic Review Note (ESERN), to identify potential environmental, social and economic risks
- Preparation of safeguard assessment and management (i.e. gender action, indigenous peoples, resettlement/livelihood restoration, stakeholder engagement) plans prior to project activity approval
- Mitigation, management and monitoring of impacts during project implementation ensuring that the actions specified in safeguard management plans are carried out

Procedures and requirements have been defined to ensure a prompt and effective response to environmental, social and economic problems that may arise.

The risks identification will be done according to pre-established formats, guidelines, and procedures, based on relevant national circumstances, and for which the participation of key actors in the entire risk management cycle will be encouraged.

The initial risk assessment indicates that, due to the focus and scope of resource use, no significant negative impacts are expected, as few risks were identified. The risks identified were associated with low probability and low impact. However, considering several previous risk analyses and potential conflicts associated with changes in land use and possible impacts on indigenous peoples’ productive activities, an update on the risk identification at the start of the project is foreseen. In addition, safeguard plans will be developed at the beginning of the project to support and guide the implementation of all activities. It is expected that these plans will provide minimum criteria for the execution of activities, or at least define criteria and actions, for the development of stakeholder involvement processes, indigenous people participation and coordination, gender mainstreaming and risk monitoring and resettlement and livelihood restoration.

The safeguards plans to be developed at the start of this project will put emphasis on the determination of processes and tools for risk monitoring, under the premises of zero tolerance to actions that could trigger risks or impacts related to the prohibited practices specified in the Green Climate Fund policy covering this issue. UNEP ensures that potential negative impacts will be analyzed and avoided, and where it is not possible to avoid them, they will be minimized, mitigated and managed, through the implementation of specific measures, continuous monitoring and institutional capacity building, among others. To this end, information on time requirements and associated costs will be provided in a timely manner, and there will be a close collaboration with project partners in the country.

Building on the precautionary approach that guides UNEP’s activities, the project will work to prevent environmental degradation and will anticipate and address harm before it happens, even if there is lack of full scientific certainty. When assessing and managing risks related to biodiversity conservation, natural habitats, and sustainable management of natural resources, the following considerations will apply during activity specific assessments during project inception:

- identification of critical or natural habitats or semi-natural habitats;
- assessment of potential impacts on ecosystem services;
- avoidance of significant conversion or degradation in habitats that are legally protected, officially proposed for protection, identified by authoritative sources for their high conservation value, or recognized as protected by traditional local communities, where national legislation so allows;
- ensuring activities in critical habitats do not have the potential to have seriously adverse impacts on the biodiversity and ecosystem services for which the critical habitat was designated;
- avoidance of activities that will lead to a net reduction in the global, national or regional population of any critically endangered or endangered species;
- ensuring no net loss of biodiversity and ecosystem services by one or more of the following:
  - avoidance of impact through identification and protection of set-asides
  - minimization of habitat fragmentation, such as with biological corridors
  - siting infrastructure investments on lands where natural habitats have already been converted
  - restoring habitats during operations or after operations
  - providing biodiversity and ecosystem services offsets
- ensuring legality of activities and consistency with any officially recognized management plans;
- avoidance of activities with adverse impacts on soils, their organic content, productivity, structure and water-retention capacity, or to contribute to reversing land degradation;
- avoidance of the introduction or utilization of invasive alien species;
- design of activities to be implemented in consultation with appropriate experts, potentially affected communities, local government, local and national NGOs, or other experts and stakeholders

Each activity under the project’s two main outputs will be assessed to determine environmental impacts, emphasising biodiversity aspects. Impacts identified will inform activity design, to minimise risks and optimise benefits, together with design of any accompanying mitigation measures, where risks cannot be removed entirely. Detailed information on biodiversity, including for example, threatened species and important
biodiversity corridors, mapped and used to support ENBCS decision making. This mapping work will be consulted and updated at project inception as part of activity specific environmental impact assessments.

Activity planning and implementation will prioritize the protection of ecologically sensitive areas using practices that mitigate risks to biodiversity, especially endangered and culturally important species. Each site will have documented baseline conditions that need to be understood and monitored. Biodiversity impact assessment and participatory monitoring of biodiversity can be implemented as a key mitigation measure, particularly in the case on indigenous and traditional peoples, which will encourage ownership and valuation of traditional knowledge. Such monitoring could also contribute information to the national SIS.

E.1.3. Consultations with stakeholders

Provide adequate and sufficient information on the consultations undertaken with all the relevant stakeholders, describing who are the identified stakeholders, what the issues and concerns raised and how these are responded to and considered in the proposed activities. Information on the stakeholder engagement plan or framework will also need to be provided, describing how the activities will continue to engage the stakeholders, further consultations, communication and outreach, and process for grievance redress.

The development of the project to reinvest results-based payments from REDD+ in improved ENBCS implementation builds on the extensive stakeholder engagement that have already been conducted in Paraguay during the readiness phase.

MADES has led the consultation process in for the elaboration of Paraguay's proposal for the results-based payments 2015-2017. This proposal was validated by key stakeholders involved in activities and processes that allowed Paraguay to reduce emissions from deforestation during this period. This joint effort follows the pre-established lines of action, developing and strengthening their capacities and synergies for continuing to reduce emissions from deforestation.

Various sectoral groups participated in the process, which is summarized below.

The main roles played by MADES and STP in Paraguay's results-based payment proposal to the GCF mean that there is significant collaboration and coordination in the development and definition of the ENBCS priority lines that the country should focus on in order to give continuity to the objective of reducing emissions from deforestation and degradation. A consultation was held where the strategic lines and a communication channel were established through the designation of a focal point from the STP to collaborate in the development of the proposal.

An information session was held with INFONA about Paraguay's opportunity to access results-based payments from the GCF, the inputs needed to develop the proposal, and the priority lines of action required to continue with the implementation of the ENBCS. The main role of the institution in the ENBCS is the monitoring of the country's forest areas and the implementation of the legal framework for forests. INFONA also works with Global Forest Watch, an interactive online monitoring and warning system on forest change designed to provide people everywhere with the information needed to enhance forest landscape management and conservation.

MADES and INDERT signed a framework agreement for inter-institutional cooperation on 22 May 2019, with the aim of designing and implementing actions between the two institutions. The partnership aims to coordinate and implement actions for compliance with environmental laws in the colonias and official settlements of INDERT. It also aims to identify and regularize transfers of "Natural Protected Areas" free of charge to MADES in compliance with Law No. 352/94 and Article 41 of Law No. 1863/02. In addition, it aims to coordinate the application of operational programs in environmental affairs, to regularize the Environmental Impact Assessments in the Settlements and Colonies of INDERT, Article 9 of Law 2419/04.

An informative session was also held with INDERT focused on Paraguay's opportunity to access GCF results-based payments; strategies and needs were defined for INDERT's support to the implementation of ENBCS. The main role of the institution in the ENBCS will be to help grant land titles to communities and other stakeholders.

Two meetings were held with representatives of the Institute of Indigenous Affairs (Instituto Paraguayo del Indígena, INDI), the Federation for Self-Determination of Indigenous Peoples (Federación por la Autodeterminación de los Pueblos Indígenas, FAPI), and with members of non-governmental organizations representing indigenous communities in order to report on Paraguay's opportunity to access GCF results-based payment and the priority lines of action for indigenous peoples for the implementation of the ENBCS were consulted. These meetings highlighted interest in the proposal and in engaging wider representation of
indigenous communities in future discussions, including at the community level. Future discussions during project inception will focus on:

a) facilitating obligatory FPIC processes (based on Decree 1039/18 – “The protocol for the consultation process and provision of FPIC of indigenous peoples in Paraguay”), and engagement of indigenous communities in project activities design, implementation and monitoring (see section E.5.); and

b) continuing to identify priority lines of action for the implementation of the ENBCS from the perspective of indigenous communities, such as through expansion of the Environmental Services Regime and development of local mechanisms to promote the commercialization of environmental services.

An ongoing commitment was confirmed to continue strengthening the link between MADES, INDI and indigenous peoples’ organizations and communities in Paraguay, supporting greater participation and spaces for discussion and decision-making related to the implementation of the ENBCS.

A Special Session of the Working Group on REDD+ (Mesa REDD+) was held on 7th June. The REDD+ Working Group was created and formed within the framework of the National Commission on Climate Change, with the aim of becoming a space for discussion and technical consultations on issues related to REDD+. During the session, the proposals of the Safeguard Information System and the Safeguard Summary of Information in Paraguay were presented to the representatives of the institutions that make up the working group. It was clarified that the safeguards information system is to be implemented through a step-wise, gradual process of continuous improvement. The plenary of the Working Group on REDD+ supported the proposal for the safeguards information system.

Amongst the participants in the session were: the president of the Federation for the Self-Determination of Indigenous Peoples (FAPI), Mr. Hipólito Acevei, representatives of various directorates of MADES, Ministry of Foreign Affairs, Paraguayan Indigenous Institute, Paraguayan Rural Association, Gyra Paraguay, Solidarity Foundation, Alter Vida, Ministry of Finance, Paraguayan Industrial Union, Ministry of Agriculture and Livestock, Itaipu, Moises Bertoni Foundation, Technical Secretariat of Planning, INFONA, FECOPROD, and Ministry of Urbanism, Housing and Habitat. A second meeting is planned to review the full proposal.

These consultations and activities will continue under the implementation of the proposal. Each line of action listed for RBPs support will count with its own consultation mechanism and will be aligned with the contents of the ESMF, which will ensure proper consultation, participation and ownership. The frequency and scale of stakeholder engagement will be commensurate with the nature of the project activity, the magnitude and probability of potential environmental and social risks and impacts, and concerns raised by affected stakeholders, particularly indigenous peoples and local communities.

The participative governance structures developed for ENBCS implementation, in alignment with the Cancun safeguards, will be employed so that project activities are discussed with a wide range of stakeholders including national and subnational government departments, civil society, indigenous peoples’ representatives, and local communities. Stakeholder engagement processes will also create spaces for dialogue, and reflection on implementation challenges, opportunities and lessons learnt, informing adaptive management of project implementation.

A project inception workshop will be held within two months of the project start date. Involving project management, implementation partners and wider stakeholders, the inception workshop will be crucial in building understanding of project objectives, outputs and activities, ownership of the project results and inform development of the first annual work plan. During the inception phase of the project, in the first 12 months of implementation, a detailed stakeholder mapping exercise and extensive stakeholder consultations will yield a stakeholder engagement plan - determining who participates, in what process, when and how, taking into account different stakeholder circumstances, needs and capacities. The plan will identify key stakeholders who may be affected by the activities to be financed by the use of proceeds and will include, inter alia:

- a participatory process to develop the plan;
- procedures for ensuring full and effective participation of stakeholders, in particular indigenous peoples and local communities, in alignment with Cancun safeguards and UNEP ESES;
- stakeholder engagement in activity level environmental and social impact assessment, which will cover the activities planned under ENBCS Climate Change Fund implementation;
- definition of the role of different stakeholders in activity design, implementation, monitoring and evaluation;
- participation of stakeholders in the application and reporting on applicable safeguards frameworks, including the development of the indigenous peoples plan and resettlement plan;
- focus on stakeholder engagement in environmental and forest law reform and enforcement (e.g. implementation of Law 3001/06 on “valuation and compensation for environmental services); and
- stakeholder engagement in the design and implementation of a communication strategy
The stakeholder engagement plan will inform the development of an indigenous peoples plan that will include standard operating procedures for Decree 1039/18 that approves the protocol for the consultation process and provision of FPIC of indigenous peoples in Paraguay, ensuring that traditional land-use rights, and access to land or resources that are the basis of indigenous peoples’ livelihoods, inform activity design, implementation and monitoring (see section E.5.).

The project will also ensure that accessible, effective and independent processes of grievance redress are operational, based on existing administrative and judicial mechanisms in Paraguay, and guided by the international good practices enshrined in the UNEP ESES Framework. Under this framework an independent office reviews complaints, including compliance concerns and grievances. It has the responsibility for managing the stakeholder response mechanism. Any complaints can be raised and communicated through the project concerned. UNEP addresses the dispute resolution and compliance review through:

- a compliance review process to respond in cases where UNEP may not be in compliance with its own ESES Framework; and
- a grievance redress process that provides people affected by UNEP projects access to appropriate and flexible dispute resolution procedures.

Project-level grievance redress procedures will be accessible to all stakeholders (being age- and gender-inclusive), confidential, consultative, culturally appropriate, subsidiary and transparency processes, and include procedures to:

- keep the public informed about project activity implementation;
- receive and register communications, concerns and complaints from the public;
- promptly assess issues raised and determine how to resolve them;
- ensure equitable treatment of all aggrieved individuals and groups
- document responses to public communications, concerns and complaints
- make appropriate adjustments in the management of the project (particularly the safeguards plans); and
- enable continuous learning informing ongoing improvements to the grievance redress mechanism.

To ensure indigenous peoples, local communities and other marginalized groups can access the grievance redress procedures, the project will ensure that:

- stakeholder response and grievance redress mechanisms will be identified or designed in consultation with the affected, or potentially affected, communities of indigenous peoples;
- the mechanisms will be culturally appropriate and readily accessible, at no cost to the affected communities, and without compensation to the individuals, groups, or communities that raised concerns;
- where feasible and suitable for the project, the grievance mechanisms will utilize existing formal or informal procedures, supplemented as needed with project-specific arrangements;
- language barriers will be taken into account, and there will be provision for interpretation when and where possible;
- there will be provision to keep complainants’ identities confidential, especially in instances where the complainants fear retaliation; and
- concerns, grievances and responses will be registered and documented, and made available to the public.

Basic information required to access the grievance redress mechanism will include:

- Actual or perceived negative economic, environmental or social impact on an individual or group, or concern about the potential of project activities to cause such impact;
- Explanation of actual, perceived or potential impact attribution to the project, i.e. how the project caused or may cause such impact;
- Explanation of how the individual or group filing of a complaint or grievance is impacted, or at risk of being impacted; and
- Evidence demonstrating that the individual or group filing a complaint or grievance has authority to represent the interest of other individual or group complainants.

Wherever possible the grievance redress mechanism will strive to foster trust between stakeholder groups and facilitate mutual resolution of concerns and complaints. At the same time mechanism will not impede access to administrative or judicial remedies, as may be applicable, and will be readily accessible to all stakeholders at no cost and without retribution.
Grievance redress mechanism design, access and operations, particularly how to make a complaint, will be communicated during the stakeholder engagement process. The grievance redress mechanism will be revised and updated following recommendations of the project activity specific environmental and social impact assessments conducted during inception. Specifically, protocols for linking and aligning project-level grievance redress with existing national and state-level, and sector-specific, systems will be a priority. Existing national-level grievance redress mechanisms in Paraguay, which the project will employ, include the Unified Portal of Public Information (Portal Unificado de Información Pública); the platform of the National Forest Institute (Instituto Forestal Nacional); and the mechanism for presenting complaints to the MADES (Denuncias Ambientales de MADES).

Further information on stakeholder engagement, including and outline stakeholder engagement plan and project-level grievance redress mechanism, are provided in the ESMF, which is included as an Annex to this proposal.

E.2. Risk assessment

E.2.1. For the period of the achieved results

Provide adequate and sufficient information that allows for an assessment of the historical performance of the activities undertaken and their track record against the risk tolerance levels specified in the Risk Appetite Statement and the criteria outlined in the Risk Guidelines for Funding Proposals.

Please note that you should consider only the applicable and relevant parts of the two above documents to the feedback you provide.

Paraguay has strong support for respecting individual and collective rights as provided by the country's Constitution. From this the country derives several laws that set a precedent for the implementation of REDD+ policies and measures in a transparent, efficient and participatory way. As part of the country's legal framework, the Law 1728/01 on administrative transparency, establishes rules and procedures to promote transparency in public management and to guarantee access to information related to administrative and government acts. Also, Law 5282/14 on Free Access of Citizens to Public Information and Government Transparency has provided important support for transparency and accountability.

Moreover, the Anti-Corruption Secretariat (SENAC) is the governing, normative and strategic entity in charge of the design, execution, implementation, monitoring, and evaluation of the National Government's public policies on anti-corruption, integrity, and transparency. The National Anti-Corruption Office is a specialized technical and management agency of the Republic's Presidency and full capacity to act in accordance with regulations and other legislative and/or administrative norms that may be dictated, for the direction, supervision, coordination, execution and evaluation of programs, projects, plans and activities within its sphere of competence.

All these elements along with the recognition of the importance of risk analysis and management, have provided support for the execution of actions that aim to reduce risks and contribute to the country's National Development Plan objectives. While the risk analysis exercises performed do not specify a difference between inherent or residual risks, repeating the exercise will confirm that both were considered. The results of this exercise indicate that residual risk tolerance levels were not exceeded, neither were there any negative impacts that might result from the implementation of prohibited practices.

There have also been established platforms for requesting and accessing information, making complaints, and promoting transparent accountability. Over the past few years, the country has allocated resources to promote transparency and institutional strengthening for the application of the legal framework, based on efficient administrative, financial and technical processes that contribute to sustainable development goals. In that sense, information related to the prohibited practices' policy was analyzed and it was identified a strong commitment to fight against corruption, to promote access to information, and to control and sanction illegal acts. The implementation of initiatives, programs, and projects during the analyzed period 2015-2017 has been consistent with the requirements of applicable standards and safeguard policies and has not been related to practices against which the Green Climate Fund has a zero-risk tolerance.

E.2.2. For the use of proceeds

Provide adequate and sufficient information that details how the plan for the use of proceeds does not violate the risk tolerance levels specified in the Risk Appetite Statement and allows for performance monitoring and evaluation against the criteria outlined in the Risk Guidelines for Funding Proposals.
The environmental and social risks and impacts related to the context of REDD+ in Paraguay are captured in the ESA of measures undertaken to ensure REDD+ actions generating results were implement in a way consistent with requirements of the GCF ESS standards (see section E.1.1.).

There is a strong commitment to avoid, minimize or mitigate environmental, social and economic risks associated with implemented projects. Therefore, all planned actions are subject to a review process according to safeguard standards during the project preparation phase, as well as design, implementation, monitoring and evaluation according to applicable safeguard standards.

The initial project preparation phase includes a due diligence process, including scoping and more detailed environmental and social assessment of the specific project activities, for determining the appropriate level of analysis and management approach proportionate to the potential risks and to direct, indirect, cumulative and associated impacts. The physical, biological, socio-cultural and economic context of the project is taken into consideration. This assessment can trigger requirements for the development and implementation of impact management instruments, which depends on the outcome of the risk assessment, including an analysis of the intensity, relevance, and scope of possible impacts.

Through execution of the procedures for implementing the ESES Framework (see section E.1.2), UNEP ensures that potential negative impacts will be assessed and avoided, and where it is not possible to avoid them, they will be minimized, mitigated and managed. It is also considered the feasibility of mitigating these impacts and associated financial and technical needs, as well as the different existing alternatives, including the option of not taking any action, the suitability of the alternatives according to local conditions and institutional requirements, training, and monitoring.

This proposal is directly related to climate change objectives and targets, and the proposed activities are in line with UNEP’s implementation capacities. The project will have a Project Management Unit that will include, among others, safeguards and gender specialists. In addition, there will be a set of executing partners, chosen on the basis of institutional mandates and on the potential to effectively contribute to the development of activities and the achievement of the objectives of the proposed project.

The results of the risk analysis are presented in the Environmental, Social and Economic Review Note (ESERN) tool. The ESERN identifies potential risks, which in general terms could be avoided or mitigated through good practices, and the inclusion of activities in the project to promote dialogue, participation and dispute resolution, if applicable. An update of the risk identification is foreseen at the start of the project. In addition, safeguards plans will be developed at the beginning of the project to support the implementation of all activities. It is expected that these plans will provide minimum criteria for the execution of activities, or at least define criteria and actions for the development of stakeholder involvement processes (see section E.1.3.), indigenous people participation and coordination (see section E.5.), gender mainstreaming and risk monitoring (see Annex 6), resettlement and livelihood restoration (see below).

Involuntary resettlement has not and will not be supported within the framework of REDD+ implementation in Paraguay, nor will it be supported as part of any of the activities implemented from the use of proceeds. It is not expected that the use-of-proceeds project will cause forced evictions or negatively affect land tenure arrangements, including communal and customary or traditional land tenure claims. Special attention will be paid to identify measures to avoid:

- involuntary resettlement particularly when a protected area is being established;
- acquisition of land or land-use rights through expropriation or negotiation;
- restrictions on land-use that community use of resources to which they have traditional use rights; and
- restrictions on access to land or use of resources in protected areas that are sources of livelihoods.

Despite all efforts to avoid loss of access to land and natural resources, the project could, however, lead to full or partial voluntary displacement or relocation of people. The possibility or restricted land and resource access, as a result of project activities, will be analysed in detail during the project inception phase through an extensive resettlement impact assessment, which, in turn, will inform a resettlement and livelihood restoration plan. This plan, developed in close consultation with affected stakeholders and in line with the government protocol on FPIC (Decree 1039/18), would specify the procedures to be followed and the actions taken to mitigate adverse effects, compensate losses, and provide benefits to persons and communities voluntarily resettling as a consequence of the project’s activities.

Indicative compensation processes will involve:
informing potentially affected persons of their rights, consulting them on options, and providing them with housing, economically feasible livelihood alternatives and technical assistance;

prompt compensation provided at full replacement cost for loss of assets attributable to the project before land clearing, construction, or access restrictions begin;

providing support throughout the transitional period, including livelihood development and restoration assistance;

compensation in the form of land for land when livelihoods of directly affected persons are land-based, or where land is in collective ownership;

the possibility of cash compensation for land when overall impact on livelihoods is assessed as relatively minor;

including adequate civic infrastructure and community services at all residential sites of resettlement;

transparent compensation procedures and standards, applied consistently to all directly affected persons;

displacement not occurring until compensation has been made available and, where applicable, resettlement sites and relocation assistance has been secured; and

providing resettlement assistance in lieu of compensation for land to help restore the livelihoods of those resettled when they do not have formal legal rights or claims to lands.

UNEP will ensure that communities and persons directly affected by planned resettlement are engaged in the planning and decision-making processes, as well as during implementation and monitoring of resettlement. There is a strong commitment, however, on the part of MADES and UNEP to ensure any resettlement will be avoided, and only carefully planned resettlement considered in cases of legal enforcement of ENBCS actions. The safeguards plan to be developed at the beginning of the project will emphasize the determination of processes and tools for risk monitoring, under the premise of zero tolerance to actions that could trigger risks or impacts related to prohibited practices specified in the Green Climate Fund policy dealing with this issue. Further information is provided on indicative resettlement, and other safeguards, plans in the ESMF, which is included as an Annex to this proposal.

E.3. Gender considerations

E.3.1. For the period of the achieved results

Provide adequate and sufficient information in the assessment describing the extent to which the measures undertaken complied with the GCF gender policy.

The design and implementation of REDD+ policies and measures in Paraguay are based on a gender mainstreaming approach, in accordance with a wide range of national laws and commitments, and specific objectives of different projects and programmes, including the UN-REDD Paraguay National Programme and the BCS project. The activities proposed are consistent with the Gender Policy and Plan of Action of the Green Climate Fund, which seeks to promote gender equality and women's empowerment, with efforts to incorporate approaches from a gender perspective ("gender responsiveness"), going much further than only applying gender sensitivity. In addition, the activities proposed are consistent with the UNEP policy on gender, which emphasizes the need to take into account six elements for gender mainstreaming as follows: i) transparency to obtain gender equity results at different levels; ii) results-based management for gender equity using indicators and protocols for evaluation; iii) supervision through monitoring, evaluation, audits, and reporting; iv) human and financial resources; v) capacity building in gender mainstreaming; vi) coherence, knowledge and information management.

Paraguay is signatory of several international conventions that focus on gender equality and women's empowerment, including CEDAW, a United Nations convention that aims at eliminating any form of discrimination against women. In addition, the National Constitution from 1992 guarantees equal rights and non-discrimination, explicitly establishing equality of persons, equality of rights between women and men and non-discrimination, providing that the State must promote the conditions and create adequate mechanisms for
such equality to become reality and effective, removing obstacles that impede or hinder its implementation and facilitating the participation of women in all spheres of national life.

Paraguay created a Women's Secretariat in 1992, which became the Women's Ministry in 2012. It also developed a National Plan for Equal Opportunities between Women and Men for the period 2008-2017. The National Development Plan 2030, which guides the ENBCS, seeks to achieve gender equity, as well as equitable development and economic equity.

The UN-REDD National Programme of Paraguay identified in its evaluation of key actors for REDD+, the following cross-cutting themes for the dialogue processes related to REDD+: the promotion of the gender approach in women's participation and the empowerment of women in discussions and in the management of natural resources. The National Programme’s participation and communication strategy aims at facilitating an equitable discussion among actors with different interests, origins, socio-political positions, socioeconomic levels, peoples, genders and cultures, and to implement mechanisms to achieve gender equity and representation of the most vulnerable sectors within the process.

Based on the mapping of actors, Paraguay has worked on the consolidation of the plan for the participation and involvement of actors from 2015 onwards. The Key Stakeholder Participation Plan of the Forests for Sustainable Growth Project, developed as an input for the ENBCS, has three specific objectives that involve gender: to promote the effective participation of stakeholders, including women; to determine the degree of stakeholder involvement and define with them the key issues; to facilitate the assessment of the environmental and social impacts implementation process of the policies and measures from the ENBCS.

Through the ENBCS, Paraguay seeks to achieve gender equity through the participation of women in all areas of forest decision-making, as well as equitable access to services, land and financial or investment credit. The Strategy aims to reduce gender inequality in a comprehensive and systematic manner, in particular through the promotion of sustainable development, conservation and protection of forests, taking into account disaggregated data collected in the implementation phase, as well as socio-economic criteria. Since changes in land use mainly affect the most vulnerable people, who depend on forest resources to survive, the ENBCS integrates multiple aspects, policies, and institutions involved in the protection of forests.

Based on the recognition of the need to strengthen actions on gender and climate change, the National Gender Strategy on Climate Change was developed and published in 2017 (ENGCC, framed in the PND 2030). It actively incorporates the gender perspective into initiatives related to climate change, "in order to ensure that men and women can live with dignity and make use of natural resources in a sustainable manner". It foresees a budget of 2,400,000 USD for 5 years of implementation. The four strategic pillars are: (1) institutional capacity-building; (2) financing; (3) education, communication, and citizen participation; (4) knowledge management and technology, and those strategic pillars are all framed within the key priority areas of the Green Climate Fund's gender policy.

In addition, several activities were implemented with the objective of involving men and women in the preparation processes for REDD+ in the country, which included:

- Involvement of men, women and other relevant groups in environmental and social risk identification exercises and on the identification of possible environmental and social benefits related to REDD+ implementation in the country.
- Participation of men and women in workshops and meetings that aimed at identifying REDD+ policies, measures and actions and the framework for the construction of the ENBCS. This process sought to identify and consider differentiated actions, including those that respond to women's priorities and needs.
• Compilation of information on the participation of men and women in events using formats that considered disaggregation by sex. This was not done in a standardized manner, but it is a recommendation that will influence future work.

• Training key actors on issues related to forests, climate change, and REDD+.

• Analysis of gaps in the inclusion of the gender approach and generation of recommendations; the following should be highlighted:
  
  o **Sustainable production systems**: encouraging women's participation in prioritizing technical assistance needs in the sector.
  
  o **Sustainable management of forests**: through the promotion and integration of local ancestral knowledge to the development of their livelihoods and environmentally friendly production, bringing forward the role of women in all processes; as well as the promotion of energy efficiency programs in local communities and indigenous peoples, in the domestic use of firewood from native forests.
  
  o **Adoption of deep-rooted, sound policies**: strengthening the access of women's groups to formal credit systems.
  
  o Development of capacities for environmental regulation, control, monitoring, and penalization: promoting the role of women in forest monitoring and protection processes.

The Environmental and Social Assessment conducted to present this funding proposal determined that the risks associated with gender inequality gaps and women's lack of empowerment did not come forward in the risk identification exercises, and therefore, only general measures to mitigate these risks have been developed. This could be due to a lack of visibility of the issue or the need to apply adequate methodologies to identify gender gaps and roles, as inputs for the formulation and implementation of REDD+ PAMs. This gap will be addressed through the construction and application of the Environmental and Social Management Framework which will be developed by the BCS project, and a similar framework defined for this proposal. The Environmental and Social Management Framework for this project/proposal foresees an updated evaluation of risks at the start of the project and the construction of a safeguard plan, which will include a section on gender with an action plan on the subject, with minimum criteria, activities and specific monitoring indicators.

E.3.2. For the use of proceeds

*Provide adequate and sufficient information on how the AE will undertake activity-level gender assessments and action plans once the details of the activities become known.*

Gender equality and women's empowerment are recognized as cross-cutting priority issues in all aspects of UN Environment's work. The participation of men and women in environmental protection and sustainable development activities is actively promoted. UNEP is committed to achieving gender-sensitive outcomes as a means of achieving environmental sustainability, and to incorporating a gender approach in the design and implementation of the activities in this proposal.

The promotion and contribution to gender equity will be specifically guided by two policies: The UN System-Wide Action Plan on Gender Equality and the Empowerment of Women which provides a framework for measuring and monitoring performance and UN Environment's Gender Policy. There are six elements that will be taken into account for gender mainstreaming in the design and implementation of the activities of this proposal; these are: i) strengthening accountability for gender equity at different levels; ii) enhancing results-based management for gender equity using indicators and protocols for evaluation; iii) establishing oversight through monitoring, evaluation, auditing and reporting; iv) allocating sufficient human and financial resources; v) capacity building for gender mainstreaming; vi) ensuring coherence, knowledge and information management.

Considering its institutional mandate, UNEP has the responsibility to contribute to the achievement of gender equality in environmental assessments, analyses, standards, guidelines and methods used to promote sustainable development and economic growth. In line with this approach, UNEP will ensure that the proposed activities will not discriminate against women or reinforce discrimination or inequalities based on gender, and implemented in coherence with the Paraguayan normative framework on the matter and the National Gender Strategy on Climate Change (*Estrategia Nacional de Género ante el Cambio Climático*). The strategy actively incorporates a gender approach into climate change initiatives through (1) institutional capacity building; (2) financing; (3) education, communication and citizen participation; (4) knowledge management and technology.
In addition to hiring a gender specialist for the Project Management Unit, which will help to ensure gender mainstreaming throughout the design and implementation of project activities, UNEP will undertake a gender assessment at the activity level, and develop action plans at the project level according to identified needs and to UNEP and GCF guidance on gender.\(^{38}\)

Within the context of continuous management, risks will be continually evaluated and monitored, and actions taken to avoid or mitigate them, in line with the gender assessment and action plans, and also Environmental and Social Assessment (ESA) and the Environmental and Social Management Framework (ESMF)/Project evaluations and tools for continuous monitoring will be designed and implemented integrating gender equality considerations.

While the initial risk identification exercises summarized in ESA (see Annex) did not emphasize risks related to gender inequality gaps, the existence of these gaps in Paraguay is widely acknowledged, and addressing these gaps will be a priority. This will also be linked to the implementation of safeguards. Some measures were implemented in the period evaluated, but these will be strengthened for the period of implementation of the activities in this proposal, in line with the elements mentioned above. Sustainable development cannot be achieved without equal rights and opportunities for women and men, and for the other key stakeholders. Therefore, it is critical to identify and implement actions that positively contribute to gender equality, including support in the implementation of Paraguay’s National Gender Strategy on Climate Change.

Further information is provided in the indicative Gender Assessment and Action Plan and the ESMF document, which are included as annexes to this proposal.

### E.4. Interim policy on prohibited practices

#### E.4.1. For the period of the achieved results

Provide appropriate and sufficient information to demonstrate that no Prohibited Practices occurred during the implementation of the activities that lead to the REDD-plus results, such as: undisclosed Prohibited Practices, including money laundering and the financing of terrorism, which occurred during the implementation of results-based actions; and double payment or financing for the same results achieved.

Paraguay has developed a legal framework in accordance with international treaties to prevent money laundering and financing of terrorism. The country also has an access to information law that has been comprehensively implemented and has demonstrated significant changes in transparency and accountability of public institutions. For the implementation of the legal framework the government has an agency within the Executive Branch called the Money Laundering Prevention Secretariat ("Secretaría de Prevención de Lavado de Dinero o Bienes", SEPRELAD) under the Presidency.

SEPRELAD’s main objective is to prevent and avoid the use of the financial system and other sectors of the economy for money laundering that comes from illegal activities. It carries out its actions in accordance with its obligations and faculties as established in Law 1015/97 "That Prevents and Represses Illicit Acts destined to the Legitimation of Money or Goods" and also to determine with precision the need for structural, legal, administrative changes, among others."\(^{39}\)

The legal framework implemented is extensive; the most important laws underpinning SEPRELAD’s actions are:

- **Law 1015/97**, "1015/96 preventing and penalizing unlawful acts to launder money or property" and creates SEPRELAD;
- **Law 3440/08**, "modifying various provisions of law 1160/97, criminal code;
- **Law 3783/09**, which amends several articles of Law No. 1015/97. "That prevents and represses the illicit acts destined to the legitimation of money or goods";
- **Law 4024/10**, "to cast the punishable facts of terrorism, terrorist association and financing of terrorism";
- **Law 4100/10**, "approving the memorandum of understanding between the governments of the states in the financial action task force of South America against money laundering (GAFISUD)";
- **Law 4503/11**, "of freezing financial funds or assets";
- **Law 5582/16**, "approving the amendment to the memorandum of understanding of GAFISUD";
- **Law 5895/17**, "establishing rules of transparency in the regime of stock corporations";


• **Decree 10144/12**, which “establishes the National Anti-Corruption Secretariat (SENAC).” This Secretariat is the governing, normative and strategic instance for the design, execution, implementation, monitoring and evaluation of the National Government's public policies on anti-corruption, integrity and transparency. It is a technical and specialized management body within the Office of the President of the Republic, with legal personality under public law and full capacity to act in accordance with regulations and other legislative and / or administrative rules that are enacted, for the direction, supervision, coordination, implementation and evaluation of programs, projects, plans and activities within its area of competence.

• **Law 2535/2005**, “Law adopting the United Nations Convention against Corruption”. Article 5 establishes that each State Party shall, in accordance with the fundamental principles of its legal system, develop and implement or maintain effective, coordinated anti-corruption policies that promote the participation of society and reflect the principles of the rule of law, proper management of public affairs and public property, integrity, transparency and accountability. In addition, it establishes that each State Party shall endeavor to establish and promote effective practices aimed at the prevention of corruption.

The relevant legislation, including all regulatory decrees, resolutions and circulars, are publicly available in SEPRELAD's virtual library.\(^40\)

The Paraguayan government has also updated its legislation to conform to international requirements, such as the amendment of the Criminal Code (Law 1160/1997). It has developed and implemented a “Strategic Plan of the Paraguayan State to Combat Money Laundering, Financing of Terrorism and the Proliferation of Weapons of Mass Destruction” approved by Presidential Decree 11200 on 11 June 2013. Recommendations from the National Country Risk Assessment on Money Laundering and Financing of Terrorism were also considered and integrated into the Strategic Plan.

The validity of this plan as well as of the existing legislation and its constant improvement guarantee that the Paraguayan government has solid internal structures and regional collaboration mechanisms to avoid prohibited practices.

### E.4.2. For the use of proceeds

*Provide appropriate and sufficient information including on control measures that assures that the proceeds will be used in a manner compliant with the Interim Policy on Prohibited Practices, such as: undisclosed Prohibited Practices, including money laundering and the financing of terrorism; improper subsequent use of GCF proceeds in the Prohibited Practices; and double payment or financing for the same results achieved, etc.*

The financial management and procurement within the project will be guided by UN Financial Regulations, Rules and practices, as well as UNEP’s programme manual. The Financial Rules of UNEP are promulgated pursuant to the Financial Regulations and Rules of the UN. Within this context, funding allocation mechanisms are managed as per UN rules and procedures, including eligibility criteria, proposal evaluation processes, quality assurance and control, project monitoring and supervision. Furthermore, the legal instruments to be signed with Executing Entities will include warranties and caveats by the Executing Entities to *inter alia* ensure compliance with the Anti-Fraud and Anti-Corruption Framework of the United Nations Secretariat\(^41\), as well as the Green Climate Fund Policy on Prohibited Practices.

In addition, the country has the mechanisms described in the previous section that guarantees that an adequate national legal framework is in place.

More information is provided on the Environmental and Social Assessment annexed to this proposal. In addition, section E of this document reports on compliance with GCF policies during the period for which results-based payments are requested and indicates how these policies will be implemented for the use of proceeds.

Further information is also provided in the ESMF document, which is included as an Annex to this proposal.

### E.5. Indigenous peoples

\(^{40}\) [http://www.seprelad.gov.py/biblioteca/1-leyes](http://www.seprelad.gov.py/biblioteca/1-leyes)

The indigenous peoples of Paraguay have ancestral ties to the land and ecosystems, which are not only of economic and livelihood importance but also of cultural and spiritual significance and are fundamental to the construction of identities, as well as ways of being, thinking, living. For this reason, the activities to be implemented with the use of proceeds will be designed so that adverse impacts on indigenous peoples are mitigated and their livelihoods can benefit from the project.

The implementation of UNEP’s ESES Framework and its specific safeguard on indigenous peoples (which is guided by the recommendations of the Permanent Forum of the United Nations for Indigenous Issues and the United Nations Declaration on the Rights of Indigenous Peoples, among other international instruments), as well as Paraguay’s national laws and commitments, will help to ensure that the activities to be implemented with the use of proceeds respond to the environmental and social standards of the Green Climate Fund. The activities will be consistent with the Green Climate Fund’s Indigenous Peoples Policy which seeks to ensure that activities are developed and implemented in a manner that fosters respect for indigenous peoples, their dignity, their human rights and their cultural uniqueness, so that they receive appropriate social and economic benefits, and do not suffer adverse effects during the process of design and implementation of the activities.

The project will be implemented in a way that respects the rights of indigenous peoples and takes into account their views, needs and rights, to avoid any harm and promote opportunities to improve their livelihoods. Adverse impacts on indigenous peoples will be avoided. Indigenous peoples’ rights and interests in environmental governance processes and procedures will be the focus of awareness-raising and capacity-building efforts. Taking into account the respect of rights determined in Constitution of Paraguay, in national laws and relevant international conventions, as well as UNEP’s ESES, several minimum criteria are explained below, which seek to engage indigenous peoples in the design, implementation and monitoring of the project. The project will consider indigenous peoples as key partners, particularly through collaboration with FAPI and INDI, for:

- planning phase of the project, including the assessment of potential environment and socioeconomic risks and impacts of activities funded through the use of proceeds;
- identifying, selecting and implementing actions to ensure adverse impacts on indigenous peoples are avoided, minimized, mitigated or compensated for in a culturally appropriate manner;
- defining who will serve as representative bodies of culturally diverse indigenous peoples, sharing their views, concerns and decisions in project consultation and decision-making fora;
- applying and documenting application of the principle of FPIC, according to international standards and Decree 1039/18 that approves the Protocol for FPIC in Paraguay;
- identifying options designed to enable indigenous people to benefit from the project in a culturally appropriate and feasible manner;
- agreeing on stakeholder response and grievance redress mechanisms that would apply based on the existing local governance systems or self-government and cultural norms (see section E.1.3.);
- fully and effectively participating in the design, implementation, monitoring and evaluation of project activities;
- identifying aspects of key cultural heritage of indigenous people that needs to be protected throughout implementation of project activities;
- determining capacity building needs for defending rights to, and interests in, land, territories and natural and cultural resources, and for participating in and benefitting from project activities;
- sharing information about, and supporting the identification of actions to protect and, where possible, promote, traditional knowledge and practices; and
- participating in the design of an equitable mechanism for distributing benefits of the project and accessing these benefits, taking into account the institutions, rules and customs of indigenous peoples.

Implementation of project activities will be consistent with UNEP’s policies on the indigenous peoples’ rights, knowledge, practices and livelihoods, and have been duly considered in the ESMF, particularly the indicative indigenous peoples plan, of the proposal. A detailed plan will be developed in collaboration with indigenous peoples during the inception phase of the project, and will aim to strengthen institutional capacities of project implementing agencies to understand the perspectives, needs and concerns of indigenous peoples, as well as to establish and employ mechanisms that consider their rights, visions and needs. It will look to raise wider awareness of the importance of the involvement of indigenous peoples, as partners and holders of valuable knowledge, and define mechanisms for engagement in project, and wider, ENBCS implementation. The recognition of the collective rights, together with acknowledgement that the cultural heritage and traditional knowledge of indigenous peoples, will contribute to the assessment of activity specific environmental and social
impact assessments, and the development of safeguards management plans. Recognizing the rights, risks, responsibilities and contributions of indigenous actors in the care of the environment, members and representatives of indigenous peoples will be involved in the development, implementation and monitoring of gender action, resettlement and livelihood restoration, stakeholder engagement and, of course, indigenous peoples, plans.

Specifically, the indigenous peoples plan will provide details of:

- culturally appropriate consultation and, where required, FPIC processes to be undertaken;
- mechanisms to conduct iterative consultation and consent processes throughout project implementation;
- particular project activities and circumstances that shall require consultation and FPIC;
- FPIC procedures, in line with Decree 1039/18, for impacts on livelihoods and cultural heritage; and
- indigenous peoples working group composition, role, responsibilities and terms of reference.

The application of standards, safeguards and specific policies is also framed by Paraguay's regulatory framework.

The recognition and protection of ancestral knowledge and the rights of indigenous peoples and local communities are embedded in the Constitution of the Republic of Paraguay. Chapter V of the Constitution recognizes the existence of indigenous peoples and defines them as groups of cultures that existed prior to the formation of the Paraguayan State. The most relevant articles are summarized below:

- **Chapter V of Indigenous Peoples (Articles 62-67),** which guarantees rights to indigenous peoples, including: (1) to "develop their ethnic identity in the respective habitat," (2) to "freely apply their systems of political, social, economic, cultural and religious organization," (3) to "voluntary subject to their customary laws," (4) to "community ownership of land, in enough quantity and quality to be able to conserve and develop their specific ways of life", (5) to not to be removed from their habitat without their explicit consent, (6) to participate in the economic, social, political and cultural life of the country, and (7) to be exempted from providing social, civil or military services.

In addition, there is a set of elements of the Paraguayan legal framework that strongly emphasize the rights of indigenous peoples, the recognition of their heritage, their traditions, and the improvement of their economic conditions. These elements, in addition to **Law 294/93 "Environmental Impact Assessment"** demonstrate the consistency between Paraguayan law and the Green Climate Fund's Policy on Indigenous Peoples.

**Law 904/81 Statute of Indigenous Communities.**

- **Article 1:** The purpose of this law is the social and cultural preservation of indigenous communities, the protection of their heritage and traditions, the improvement of their economic conditions, their effective participation in the process of national development and their access to a legal system that guarantees them ownership of land and other productive resources on an equal foot with other citizens. The Paraguayan Institute of the Indigenous Peoples (*Instituto Paraguayo del Indigena, INDI*), created by **Law 904/81**, has as its mission the patrimonial, cultural and traditional protection of indigenous communities and the provision of legal assistance.

**Law 2128/03** ratifies the Convention against all forms of racial discrimination.

Paraguay is a signatory to ILO's **Convention 169, concerning Indigenous and Tribal Peoples in Independent Countries**, which falls within the framework of **Law 234/93 concerning Indigenous and Tribal Peoples, adopted by the International Labour Organization in 1989.** It is also a signatory to the United Nations Declaration on the Rights of Indigenous Peoples and the American Declaration on the Rights of Indigenous Peoples.

In addition, **Decree 1039/18** approving the "Protocol for the Process of Consultation and Free, Prior and Informed Consent with Indigenous Peoples Living in Paraguay" is the result of nine years of consultation and preparation between various government agencies and representatives of indigenous organizations. It became an official regulation in 2018. This protocol is based on Chapter V of the Indigenous Peoples Constitution, as well as Convention 169, the United Nations Declaration on the Rights of Indigenous Peoples, the American Convention on Human Rights and other international instruments ratified by Paraguay. This protocol authorizes the Paraguayan Institute of the Indigenous Peoples (INDI) to issue relevant regulations for the effective
implementation of the provision, with the collaboration of indigenous peoples. The protocol will apply, as appropriate, to the activities implemented within the framework of this proposal to ensure that activities are carried out in line with the rights, cultures, visions and priorities of the participating indigenous peoples.

Further information is provided in the ESMF document, which is included as an Annex to this proposal.

### E.6. Monitoring and evaluation

Provide information on the monitoring arrangements that will take place for providing annual monitoring reports based on the information provided for the use of proceeds in sections C.2.3 and C.2.4.

Monitoring and evaluation will follow established UNEP and GCF evaluation policies. The M&E plan will include an inception report, annual reports to GCF and UNEP, a mid-term review/evaluation, and terminal evaluation. The project's M&E plan will be finalized at a project's workshop including final agreement on indicators, means of verification, and M&E responsibilities.

#### Project Inception Workshop

The Inception Workshop will serve the following purpose:

- Detail and clarify roles and responsibilities of the different partners involved in implementation;
- Finalization of the first annual work plan;
- Validate indicators, targets and means of verification;
- Finalization of the Gender Action Plan;
- Review of reporting, monitoring, evaluation protocols and timetable;
- Formal launching of the project

#### Annual reporting

Annual reports will be prepared by the project Management Unit and approved by Project Steering Committee. The format and content of the annual report will follow UNEP and GCF templates. Reports will be based on the following:

- Collection and consolidation of data as agreed in means of verification;
- Data used in the analysis will be available to external parties;
- Assessment of progress towards performance milestones will be based on a transparent process;

In addition, and as needed, UNEP may conduct field visits to assess progress. GCF’s and Project Steering Committee members may also request to join these visits.

#### Mid-term review/evaluation

The project will undergo an independent mid-term review/evaluation at year 3 of implementation. The midterm review/evaluation will assess progress towards outputs and identify issues requiring decisions and actions. The mid-term review/evaluation will provide feedback on project implementation and management and its finding will guide recommendations and adjustments until project termination date. The report will be made available in English and Spanish.

#### Terminal evaluation

An independent Terminal Evaluation (TE) will take place at the end of project implementation. UNEP’s Evaluation Office (EO) will be responsible for undertaking the TE at the end of project implementation, which is a summative evaluation, and will liaise with the UNEP Task Manager throughout the process. An independent assessment of project performance against standard evaluation criteria (e.g. strategic relevance, effectiveness, efficiency, likelihood of impact and sustainability) will be made based on documentary evidence, stakeholder interviews and, in most cases, a field mission. Each evaluation criterion will be rated using a six-point rating scheme, and a weighted average will be determined to provide an overall performance rating for the project as a whole. Where there are any differences in ratings between the evaluation team and the Evaluation Office a final determination will be made by the Evaluation Office when the evaluation report is finalised.

The draft TE report will be sent to project stakeholders during a commenting process managed by the Evaluation Office. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. This evaluation report will be publicly disclosed and will be followed by a recommendation compliance process.

The final report will be presented to the Project Steering Committee for approval. The report will be made public in both English and Spanish.

F. Legal arrangements

E.6.1. Legal title to REDD-plus results

Paraguay’s legal framework does not define the ownership of carbon. However, the country has several laws and precedents that provide MADES with the mandate to receive, manage and administer payments for environmental services, including those resulting from forest protection, as well as to manage resources and funding for climate change mitigation and actions related to environmental conservation.

The Law No. 1561/00, which established the former SEAM as an institutional body (now elevated to the rank of Ministry, MADES) also gave it mandate to lead on environmental management policies, taking into consideration that the environment is a shared good of all citizens of Paraguay and with the aim of promoting a sustainable development model for the country. This mandate was strengthened with the creation of MADES.

In this context, MADES’ supports the development and implementation of plans, programs and projects related to climate change mitigation and to the sustainable use of the country’s biological diversity. In order to achieve this, MADES develops, regulates, coordinates, executes and oversees environmental policies and management and builds capacity for achieving sustainable development, while ensuring broad social participation.

Within this policy and institutional framework, Paraguay has recognized the key role of environmental services in environmental protection and sustainable development. The environmental services provided by forests are of particular importance as they contribute to avoided emissions. In 2006, Paraguay put into effect the Ley de Valoración y Retribución de Servicios Ambientales N 3001/06 (Law on Environmental Services Valuation and Compensation). This Law establishes the legal definition of payments for environmental services (PES), the rights and obligations between parties. It also defines the classification of types of agreements, the qualification of the parties that can participate in agreements (individuals, landholders, public and private legal entities) and the necessary elements for its implementation.

The Law 3001/06 gives MADES the mandate and responsibility to regulate and implement the PES system.

This regulation establishes that forest owners that meet the conditions to provide environmental services will be entitled to compensation for the services provided, in accordance with the guidelines established by the State. The regulations from Law 3001/06 define the conditions and requirements to be eligible for payments for environmental services. Forest owners do not have an automatic right to receive a payment for environmental services. Only to those who have joined the scheme and meet the necessary requirements can.

For example, it is not enough to preserve forest cover to receive payments. The area must also surpass a minimum threshold established in the Forestry Law. It is also necessary, among other elements, to comply with management requirements that will ensure the preservation of the forest.

The role of MADES in implementing and managing funds for actions aimed at tackling climate change is also well defined in the Law 5875 on Climate Change. As stated in Article 2, the Law's main purpose is to support the implementation of actions that will reduce the country's vulnerability, improve its adaptive capacities and enable the development of proposals for the mitigation of climate change. The text states that the Law's interpretation, its regulations and other administrative acts adopted as a consequence will take into consideration the principles established by the United Nations Framework Convention on Climate Change, the declaration on Environment and Development adopted in Rio de Janeiro in 1992, the National Environmental Policy and the National Climate Change Policy. The National Climate Change Policy establishes the objectives that the government of Paraguay will have to achieve in order to meet the obligations to which the country committed by ratifying the UNFCCC.

Law 5875 creates the National Climate Change Fund whose objective is to raise and implement public, private, national and international financial resources to support the implementation of actions to address climate change and gives MADES the responsibility of administering and implementing the fund. The Fund's financing sources include contributions from international agencies and other national governments. The Law also establishes that MADES shall have exclusive competence to identify, obtain, and manage public, private, national and international financial resources raised, in order to undertake actions aimed at mitigating climate change.
Paraguay’s current legal context, particularly Law 3001/06 on environmental services and Law 5875 on Climate Change, give MADES the mandate to receive and channel resources obtained from results-based payments. As for the specific case of this proposal, MADES will also have the responsibility of ensuring that these resources are invested in actions included in the ENBCS in a participatory manner and with transparency.

The support provided by the FCPF project, which is being managed in Paraguay by UNDP, includes actions to define key elements of carbon ownership. The definition is expected by 2020.

G. Accredited entity fee and project management costs

Provide a list of the activities that are expected to be conducted using the AE fees and project management cost with corresponding costs as follows:

Figures provided below are estimated on the basis of the budget provided in section C.2.4.

**Table 17:** see attached table.

**Table 18:** Project management costs

This product includes all actions for the implementation of the project, such as the preparation of the plans/programmes and annual budgets, including analysis and the reporting; elaboration of agreement for the administration of the funds; the signing of implementation agreements with UNDP, FAO and others as executing agencies for specific components of the ENBCS; drafting of recruitment plans; preparation of TOR and preparation of procurement packages; provision of advice and follow-up to the implementation of the project; elaboration of progress and financial management reports; support for programmatic visits, workshops and field missions; support to the project board and the Project Advisory Committee; project audits and evaluations. Also included in this product are the costs of offices, logistics and direct implementation costs.

<table>
<thead>
<tr>
<th>List of activities</th>
<th>Costs (USD)</th>
<th>Explanation/justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project officer (full time)</td>
<td>1,050,000</td>
<td>Senior Programme Officer for the duration of the project</td>
</tr>
<tr>
<td>Procurement &amp; Administrative officer</td>
<td>268,450</td>
<td>Provision of administrative services to both Outputs 1 and 2</td>
</tr>
<tr>
<td>Knowledge management officer</td>
<td>288,400</td>
<td>Full time expert servicing Outputs 1 and 2</td>
</tr>
<tr>
<td>Finance specialist</td>
<td>343,000</td>
<td>Full time expert servicing Outputs 1 and 2</td>
</tr>
<tr>
<td>Gender officer</td>
<td>288,400</td>
<td>Responsible for ensuring compliance with Gender Action Plan for all activities under this Funding Proposal</td>
</tr>
<tr>
<td>Safeguards officer</td>
<td>288,400</td>
<td>Responsible for ensuring compliance with GCF and AE safeguards requirements</td>
</tr>
<tr>
<td>Operations officer</td>
<td>163,800</td>
<td>Support for day to day operations and coordination</td>
</tr>
<tr>
<td>Outreach Specialist</td>
<td>104,300</td>
<td>Professional responsible for communication activities</td>
</tr>
<tr>
<td>Evaluations</td>
<td>42,000</td>
<td>Estimated costs for 2 external evaluation</td>
</tr>
<tr>
<td>Auditing</td>
<td>56,000</td>
<td>Estimated costs of 5 auditing exercises</td>
</tr>
<tr>
<td>Incidentals (5%)</td>
<td>152,250</td>
<td>Calculated for the entire duration of project (72 months)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,045,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Other Project Support Costs**

| Logistic and facility Costs         | 593,880     | All cost associated to operations (rent; mobility; utilities, etc.)                      |
| Travel                              | 441,000     | In country and international travel                                                     |
| UNEP direct project costs           | 1,152,620   | Cover for transaction costs needed to implement the project                              |
| **Total**                           | **2,187,500**|                                                                                          |
| Grand Total | 2,187,500 |

**H. Annexes**

1. List of acronyms
2. Environmental and social assessment (ESA)
3. Non-objection Letter
4. Environmental and Social Management Framework
5. UNEP Environmental Social and Economic Review Note (ESERN)
6. Indicative Gender Assessment and Action Plan
7. Buffer estimations
8. Climate Change Fund – a description
9. National Strategy for Forest and Sustainable Growth (ENBCS) – a summary