Mid-term Progress Report
URUGUAY
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Forest Carbon Partnership Facility (FCPF)
Readiness Fund

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**Note:** FMT Note 2012-7 rev lays out the process for REDD Country Participants to submit, and the Participants Committee (PC) to review, mid-term progress reports and requests for additional funding of up to US\$5 million.

# 1. INTRODUCTION

The REDD+ readiness process in Uruguay faces challenges that differ to a certain degree from the typical challenges faced by other countries in the region, which are in the process to complete or have completed the readiness phase. These challenges can be characterized as follows:: First, limited baseline information on native forests, primarily with respect to carbon, biodiversity, ecology, potential uses for wood, etc.; second, a cultural limitation regarding the relationship between the Uruguayan society and the native forest. Native forest, a naturally scarce resource in Uruguay, was heavily altered and depleted during the last century. This threatened its sustainability and forced the country to take measures during the past 50 years.

The flipside to these challenges is that there is already an institutional political framework in place in which the REDD+ project in Uruguay may be inserted, in its readiness and implementation phases. With respect to this framework, which is described in further detail in section 2.2.C., the country has passed a National Climate Change Policy (PNCC) and a Nationally Determined Contribution that guides the implementation of the PNCC. Both instruments were created within the framework of the National Climate Change and Variability Response System (SNRCC), which meets regularly and brings together representatives of key national and local government actors. Within this framework, the project is executed by two ministries: The Ministry of Livestock, Agriculture and Fisheries (MGAP) and the Ministry of Housing, Territorial Planning and Environment (MVOTMA), which signed an interministerial agreement to work on a coordinated development of the REDD+ project activities and recommendations.

On the other hand, the Government's Forest Policy, derived from the Forest Law No. 15,939, has achieved its two main objectives during the past thirty years: 1) the generation of alternative forest resources through the planting of forests with exotic species, and 2) a contribution to the conservation of native forests by establishing a foundation for its sustainable use. Both objectives are interrelated, as it is expected that the generation of alternative resources has helped to reduce the pressure to use native forests and created the basis for a forestry resource to support a growing forestry sector.

Project's slow progress in its initial phases were due not only to the aforementioned challenges, but also to some initial administrative difficulties. The institutional political framework allows the project to gain ground within a context that guarantees the process' sustainability, at least from an institutional perspective.

Increasing participation and consultation is fundamental within the project's framework to enhance the ability of different actors (civil society, academia, government and the private sector) to understand and take part in REDD+readiness process.

For the inter-institutional coordination aspects, it is important to highlight that each of the key areas within MGAP and MVOTMA have hired positions financed by the project to work both on the REDD+ project and on their respective areas, so that they are familiar with the institutional structure of their areas and the projects and actions in process within the ministries, as well as the particularities of REDD+. Thanks to this, the current REDD+ actions and proposals included in the REDD+ National Strategy are specific to REDD+, yet not disconnected from the progress made by other institutions working on climate change and the management of the country's natural resources.

The following section was developed by the technical team in consultation with the Technical Committee. This section describes progress made in each sub-component in line with the indicators of the Readiness Package available in the "Guide to the FCPF Readiness Assessment Framework, June 2013", and follows the assessment system suggested in the readiness package: green = significant progress; yellow = progressing well, further development required; orange

= further development required; red = not yet demonstrating progress (See Table 1). The table presents an assessment of the progress made. The second column (Readiness Goal) shows the degree of progress made with respect to the **final progress expected at the end of project execution** and ideally in the readiness phase.

This section includes a third column (Mid-term Goal) showing the level of progress made in relation to the project's planning. Indicators are designed to assess progress in relation to the readiness goal. However, even if the project is running as planned, most of the indicators will not reflect project's implementation. To date, many of the indicators have not been met, however the project is progressing as planned to reach them. Regardless of some areas being behind schedule (yellows in the third column), the project has identified them and is working to level them up.

Table 1. Indicators of the Readiness Package from Uruguay based on the "Guide to the FCPF Readiness Assessment" Framework

1 - Organización y consultas para la preparación	Meta	Meta Medio
1a. Mecanismos nacionales de gestión del programa de REDD	Preparación	Término
Indicador de progreso 1: Rendición de cuentas y transparencia		
Indicador de Progreso 2: Mandato operativo y presupuesto		
Indicador de Progreso 3: Mecanismos de coordinación multisectorial y colaboración intersectorial		
Indicador de Progreso 4: Capacidad de supervisión técnica		
Indicador de Progreso 5: Capacidad de gestión de fondos		
Indicador de Progreso 6: Mecanismo de Intercambio de información y compensación de reclamaciones		
1b. Consulta, participación y difusión social		
Indicador de Progreso 7: Participación e intervención de las principales partes interesadas		T.
Indicador de Progreso 8: Proceso de consulta		
Indicador de Progreso 9: Intercambio de información y acceso a la información		
Indicador de Progreso 10: Ejecución y divulgación pública		
2 – Preparación de la estrategia de REDD+	Meta	Meta Medio
2a. Evaluación sobre el uso de la tierra, los factores causantes de los cambios en el uso de la tierra, la ley forestal, la política y la gestión	Preparación	Término
Indicador de Progreso 11: Evaluación y análisis del uso de la tierra	opuración	
Indicador de Progreso 12: Establecimiento de prioridades de los factores causantes directos e indirectos/las barreras para el aumento de las		
reservas de carbono de los bosques		
Indicador de Progreso 13: Relaciones entre factores causantes/barreras y actividades REDD+		··· <mark>······</mark>
Indicador de Progreso 14: Planes de acción para abordar los derechos a los recursos naturales, la tenencia de la tierra y la gestión.		
Indicador de Progreso 15: Implicaciones para las leyes y políticas sobre bosques		
2b Opciones de estrategia de REDD+	.i	<u>L</u>
Indicador de Progreso 16: Presentación y establecimiento de prioridades de las opciones de estrategia de REDD+		
Indicador de Progreso 17: Evaluación de la viabilidad		··
Indicador de Progreso 18: Implicaciones de las opciones de estrategia sobre las políticas sectoriales existentes		··· <mark>······</mark>
2c. Marco de ejecución		
Indicador de Progreso 19: Adopción e implementación de legislación/reglamentos	T.	
Indicador de Progreso 20: Directrices para la implementación		
Identificador de Progreso 21: Mecanismos de reparto de beneficios		··· <mark>·······</mark>
Identificador de Progreso 22: Registro nacional de REDD+ y actividades del sistema de seguimiento de REDD+		·· <del>·</del> ·····
2d. Impactos sociales y ambientales	.i	
Identificador de Progreso 23: Análisis de las cuestiones relacionadas con las salvaguardas sociales y ambientales		
Identificador de Progreso 24: Diseño de la estrategia de REDD+ con respecto a los impactos		<mark></mark>
Identificador de Progreso 25: Marco de gestión ambiental y social		<del>-</del>
neeminaaurue mogreso 25: Marco de gestion ambientar y social	Meta	Meta Medio
3 – Niveles de referencia de las emisiones/niveles de referencia	Preparación	Término
Indicador de Progreso 26: Demostración de la metodología	rieparacion	Termino
Indicador de Progreso 27: Uso de datos históricos y ajustados a las circunstancias nacionales		
Indicador de Progreso 28: Viabilidad técnica del enfoque metodológico, y congruencia con la orientación y las directrices de la CMNUCC/el IPCC		<mark></mark>
4 – Sistemas de seguimiento forestal y de información sobre las salvaguardas	Meta	Meta Medio
4a Sistema de seguimiento forestal nacional y salvaguardas	Preparación	Término
Indicador de Progreso 29: Documentación del enfoque de seguimiento	Preparación	Termino
Indicador de Progreso 29: Documentación de la ejecución temprana del sistema		<u></u>
Indicador de Progreso 30: Demostración de la ejecución temprana del sistema  Indicador de Progreso 31: Mecanismos y capacidades institucionales		<mark></mark>
4b Sistema de Información para múltiples beneficios, otros impactos, gestión y salvaguardas		
Indicador de Progreso 32: Identificación de los aspectos pertinentes no relacionados con el carbono y de las cuestiones sociales y ambientales		
Indicador de Progreso 33: Seguimiento, presentación de informes e intercambio de información		
Indicador de Progreso 34: Mecanismos y capacidades institucionales		

# 2. AN OVERVIEW OF THE PROGRESS MADE IN THE IMPLEMENTATION OF THE R-PP

# READINESS ORGANIZATION AND CONSULTATION

# 2.1A. NATIONAL READINESS MANAGEMENT MECHANISMS

# ACCOUNTABILITY AND TRANSPARENCY

How are national REDD+ institutions and management arrangements demonstrating they are operating in an open, accountable and transparent manner?

The national REDD+ institutions and REDD+ management mechanisms, such as the institutional and financial structure, benefit-sharing mechanisms, etc., are being discussed during the readiness phase. Therefore, it is not possible to report on these at themoment.

It is possible to report on the institutions that are coordinating and leading the REDD+ project readiness phase, and this is reported extensively below.

#### OPERATING MANDATE AND BUDGET

How is it shown that national REDD+ institutions operate under clear mutually supportive mandates with adequate, predictable and sustainable budgets?

As in the previous question, given the fact that we are still in the middle of the readiness phase, no answer can be given on the mandates and budgets of the national REDD+ institutions, which must be functional for the execution phase.

#### MULTI-SECTOR COORDINATION MECHANISMS AND CROSS-SECTOR COLLABORATION

How are national REDD+ institutions and management arrangements ensuring REDD+ activities are coordinated, integrated into and influencing the broader national or sector policy frameworks (e.g., agriculture, environment, natural resources management, infrastructure development and land-use planning)?

In this case, once again we are unable to respond regarding the national REDD+ institutions due to the fact that we are still in the middle of the readiness phase. We can provide some information on the status of the readiness phase, and later in this report we discuss the situation regarding national and sector policies and frameworks.

The REDD+ process in Uruguay is carried out in coordination between the Ministry of Livestock, Agriculture and Fisheries (MGAP) and the Ministry of Housing, Territorial Planning and Environment (MVOTMA). Because this project is jointly executed by the MVOTMA and the MGAP, a specific and ad-hoc institutional framework has been developed and formalized in a Ministerial Agreement signed by both Ministries on May 8, 2015. This institutional framework establishes the following governance of the REDD+ readiness project:

The parties agree on the joint and coordinated execution of the Readiness Project for Uruguay's participation in REDD+, led by the FCPF. For this purpose, the Project Execution will be the responsibility of both Ministries according to the following considerations:

**The political coordination** of the project will be carried out jointly and led by the General Forestry Department (DGF) of the MGAP as the national forestry authority, and by the National Environment Department (DINAMA) of the MVOTMA, as the national environmental authority and as a Focal Point of the UN Framework Convention on Climate Change (UNFCCC).

**The technical coordination** of the project will be carried out jointly and led by the Director of the Forest Governance Division of the DGF and by the Director of the Climate Change Division (DCC) of the DINAMA. The current coordination shall be subject to the institutional modifications that are underway.

**Project management** shall be led by the Project Management Unit (UGP) of the MGAP.

Additionally, a technical committee (REDD+ Committee) will be composed of technical staff from the Forest Management and Forest Information Monitoring Divisions of the DGF, Climate Change Unit of the Office of Programming and Agricultural Policies (OPYPA), and the Climate Change and Biodiversity Divisions of DINAMA.

In fact, this Technical Committee has also been expanded to include the Bureau of Agricultural Programming and Policies and the technical project coordinator.

Donation funds are managed as national budget resources. The technical execution is led by the Uruguay REDD+ Project. This institutional structure is illustrated in Figure 1 below.

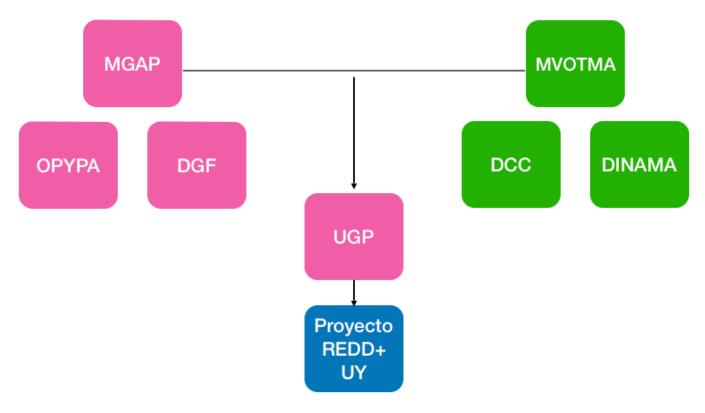


Figure 1 Structure according to the Bi-Ministerial Agreement.

In addition to the Political and Technical Committee, there is also coordination among the technical staff working on the project. For each of the divisions and departments indicated in Figure 1, there is at least one member of the technical staff who works part-time in one of the 4 institutions. This allows for an ongoing exchange of information between the project and the institutions directly related to the REDD+ objectives. This helps ensure that the REDD+ activity management mechanisms are coordinated and integrated with the general frameworks of existing and future national and sector policies.

Finally, it is important to mention that both the MGAP and the MVOTMA have a history of working with participation platforms with national coverage at the territorial level for the development of production policies that integrate resource conservation and ecosystem services. These participation spaces for both ministries essentially bring together actors from different sectors strongly tied to the country's forest ecosystems (e.g., civil society, rural production companies, educational institutions, etc.), and they have been used to channel the participation, communication and consultation activities of the REDD+ process.

# TECHNICAL SUPERVISION CAPACITY

How effectively and efficiently are national REDD+ institutions and management arrangements leading and supervising multi-sector readiness activities, including the regular supervision of technical preparations?

Once again, we are unable to respond regarding the national REDD+ institutions due to the fact that we are still in the middle of the readiness phase. In the previous point, we referred to operations during the readiness phase. We can add that the Technical Committee meets once every 45 to 60 days, and the members nominated to represent their institutions in the committee have technical knowledge in the areas of their respective institutions (e.g., climate

change, forestry, gas inventory, biodiversity) and are supported by a technical team whose skills are tied to forestry, economy, society, environment, remote sensing and other specializations related to particular aspects of REDD+.

The latter is related to the fact that the Project is helping to consolidate institutional capacities, incorporating techniques for developing and overseeing the products needed to complete the Readiness phase. This step is key to ensuring the existence of adequate technical skills for the technical supervision of the implementation phase.

#### FUNDS MANAGEMENT CAPACITY

How are institutions and arrangements demonstrating effective, efficient and transparent fiscal management, including coordination with other development partner-funded activities?

As the project is still in the readiness phase, this section reports on the funds management capacity during this phase.

The execution of funds for the readiness phase of the REDD+ National Strategy is being managed by the Ministry of Livestock, Agriculture and Fisheries (MGAP) in coordination with the Ministry of Housing, Territorial Planning and Environment (MVOTMA). For this, two coordination committees were created, and which are composed of members of each Ministry, one technical and one political, in order to resolve the main aspects and implementation and execution guidelines to be developed within the framework of national policies and the donation contract.

Financial and procurement management is carried out by the Project Management Unit of the MGAP and applies the Text of the Law on Accounting and Financial Administration (TOCAF), government procurement standards, and World Bank procurement policies.

This uses the following systems:

- Integrated Financial Reporting System (SIIF) of the Ministry of Economy and Finance, where all payments are processed and audited ex ante by the Federal Court of Auditors (TCR) and the National Auditor General (CGN).
- State Purchasing and Procurement System (SICE), where all price quotations are performed, as well as bids and calls for corporate consulting. Prior to the awarding the contracts, the processes are audited by the TCR.
- Uruguay Concursa: Website that publishes calls for individual consultants for a minimum of 15 days.
- National Public Investment System (SNIP), where projects are recorded, and their progress is monitored through indicators.
- Comprehensive Management System (SGI): MGAP's system, designed to completely manage information and bookkeeping for different projects.
- Systematic Tracking on Exchanges in Procurement (STEP): World Bank System where project procurements are planned and reported.

Notwithstanding the audits performed by the TCR and the CGN prior to awarding bids and making the respective payments, Financial Statement audits are performed as well as World Bank audits in terms of trust management and procurement management.

# FEEDBACK AND GRIEVANCE REDRESS MECHANISM

What evidence is there to demonstrate the mechanism is operating at the national, subnational and local levels, is transparent, impartial, has a clearly defined mandate, and adequate expertise and resources?

What evidence is there that potentially impacted communities are aware of, have access to, and the mechanism is responsive to feedback and grievances?

The feedback and grievance redress mechanism has not yet been established as the country is still in the middle of the readiness phase, though we plan to make progress on this matter during 2019. Regarding the Grievance Redress and Resolution Mechanism, the REDD+ Technical Team will assess the available system for the DACC Project and other lines of government, as well as the requirements of the FCPF Methodological Framework, and will assess the work needed to generate a system that meets these requirements, while also analyzing the possibility of performing this work with own funds or through procurement. This mechanism is expected to be ready before Project completion and by the end of 2019.

Considering the above, it is important to note that during the readiness phase, multiple consultation activities have been carried out which include feedback. For example, consultation on the causes of deforestation, whose results have been incorporated in the current report on the causes of deforestation; technical meetings associated with usage map production and change in use; among other elements highlighted later in this report.

# 2.1B. CONSULTATION, PARTICIPATION AND OUTREACH

# PARTICIPATION AND ENGAGEMENT OF KEY STAKEHOLDERS.

How is the full, effective and on-going participation of key stakeholders demonstrated through institutional mechanisms (including extra efforts to engage marginalized groups such as forest-dependent women, youth, Indigenous Peoples and local communities)?

What are the participatory mechanisms being used to ensure that Indigenous Peoples and forest-dependent communities have the capacity to effectively participate in REDD+ readiness and implementation?

While there is no evidence of communities that depend on the forest for subsistence, there are a number of actors that interact with the forest in different ways. These interactions depend mostly on location (urban and rural), access, forest ownership, etc. This also places a number of these actors at varying levels of vulnerability. For this reason, the project team takes specific actions during the participation and consultation activities to ensure the effective participation of these different actors.

From an interinstitutional perspective, MGAP and MVOTMA already have a space for participation and consultation, which has been taken as a starting point for the consultation and feedback activities. Upon identification of this coordination network with different key actors for the REDD+ process, the project incorporated the Ministries' existing institutional mechanisms to generate synergy and interaction with the State's existing approach. Therefore, they build upon the spaces created by the Rural Development Round Tables and Departmental Agricultural Councils led by local MGAP staff and the Advisory Commissions of the National Protected Areas System (SNAP) coordinated by MVOTMA.

The MGAP created the Rural Development Round Tables (Art. 11, Law 18,126/2007) in 2007 as departmental coordination instruments. These Round Tables are composed of subnational government officials, representatives of the agricultural cooperatives, family production companies and representatives of regional universities, as well as leaders of other Ministry programs at the territorial level.

MVOTMA's SNAP has Specific Advisory Commissions (CAE, Art 9 Law No. 17,234/2000) tied to the management of each area, where a number of actors also come together to track the management of protected areas and the activities carried out within them.

The institutional leaders tied to the Rural Development Round Tables and CAEs were contacted in 2017, and regional meetings were held to plan, disseminate and promote the REDD+ participation and consultation activities. This initiative was aimed at boosting the participation spaces detected during the early consultation phase in 2014. At the same time, it sought to consolidate the interinstitutional work of both ministries and their coordination with

subnational and local institutions and organizations, to generate a highly representative space conducive to the participation and consultation activities of the REDD+ National Strategy on native forests.

As explained above, the REDD+ project is supported upon the Rural Development Round Tables coordinated by the MGAP at the departmental level and the Specific Advisory Commissions of the MVOTMA, in order to channel the participation, communication and consultation activities within the REED+ Strategy readiness process. These existing spaces, in addition to the enhanced interinstitutional work of both ministries and their coordination with subnational and institutions and organizations, have generated a highly representative space conducive to the participation and consultation activities of the REDD+ National Strategy on native forests.

During the second half of 2017, meetings were held with the departmental leaders of the Decentralization Department and General Department for Rural Development, both within the MGAP. General presentations were given on REDD+ and the objectives of the participation and consultation activities for the local technical teams. This was followed by a diagnosis of the benefits and causes of degradation and deforestation. Finally, a map of the actors identified for invitation to the departmental workshops was presented for review and the proposal of new actors to be considered for participation. Likewise, some key contacts were made at MVOTMA's SNAP as well as with staff from different protected areas performing activities under the same format as that described for the territorial leaders of MGAP.

The meetings with the departmental teams from both ministries helped define 5 departmental consultation activities for all of 2018. These participation and consultation activities invite different sectors of civil society and public and private institutions: environmentalist organizations, indigenous community leaders, rural development companies, agrarian cooperatives, forestry companies, as well as university leaders and representatives of departmental and national government, several ministries, as well as the Bureau of Planning and Budget.

With respect to the indigenous community organizations, these have been identified during the definition of the participation plan and were specifically invited to informative meetings and workshops held within the framework of the consultation on the causes of deforestation and forest degradation and the identification of multiple benefits. At the same time, a study is being carried out to identify the vulnerable minorities and their relationship to the native forest, namely: indigenous communities, Afro-descendants, rural women, among others. Regarding the indigenous communities and based on the OP4.10 protection, the project prioritizes a specific study on this population. This study is being carried out by the REDD+ Technical Team with its own resources. To date, progress has been made in terms of the bibliographic review, list of qualified informants, preparation of interview guidelines and work methodology, and interviews with the Charrua National Council (CONACHA) and some researchers and anthropologists to analyze the alternatives for addressing the indigenous community organizations. Progress has also been made in the mapping of the existing organizations and their relationship to the areas where, according to the information obtained from the National Statistics Institute (INE), the population claims to have indigenous roots. At present, the consultation workshops are being scheduled, estimating a maximum of 5 workshops to be held prior to November 2018. By the end of 2018 we expect to have more clarity regarding the situation of the indigenous communities and their organizations in relation to the forest.

# Participation Plan for the REDD+ Readiness Phase

In order to launch different activities within the framework of the SESA process, a participation plan was defined which includes the following aspects:

- Map of the relevant actors to be invited to participate in REDD+
- Proposal of the members of the REDD+ Round Table
- Project communication elements for the disclosure of progress and outcomes
- Consultation phases within the readiness framework of the ENREDD+ (REDD+ National Strategy).

Regarding the **mapping of actors**, several interest groups were identified for participation in the communications and participation plan. These include:

- 1) the national, subnational and local public sector;
- 2) civil society organizations linked to environmental, indigenous, youth and rural women issues;
- 3) producer associations with representation at the national and local levels;
- 4) private sector tied to agricultural industry, forestation and tourism, among others;
- 5) educational sector: elementary school, high school, technical training and university level.

The list of groups and actors identified by the REDD+ team was reviewed and corroborated with the central and territorial representatives of MGAP and MVOTMA. This list was taken into consideration for the activities held up to now in the different participation spaces, including both territorial workshops and the formation of the REDD+ Round Table.

Specifically, for the preparation of the departmental consultation activities held up until now, the list was reviewed and expanded according to the local knowledge of the territorial leaders of MGAP and MVOTMA, in order to extend the invitation to specific actors tied to women's groups and rural youth, local representatives of indigenous community organizations and local communities with special ties to the forest. In cases where it was deemed necessary, personal contact was made with the leaders of local groups to ensure their participation. Transportation to the participation activities was also coordinated for people who for various reasons were unable to arrange their own transportation to the site of the consultation events.

The list of actors prepared by the REDD+ team will also be used as a basis for the process tied to SESA, which is expected to begin to operate upon a working version of the strategy around the middle of the second half of 2018.

The mapping of the actors has also been used as a starting point to define the members of the REDD+ Round Table, including actors from civil society, academia, the private sector and government. Progress has also been made in the institutional sphere, which will give a functional framework to the REDD+ Round Table. This functional framework is the National Climate Change and Variability Response System (SNRCC), which was created in 2009 by presidential

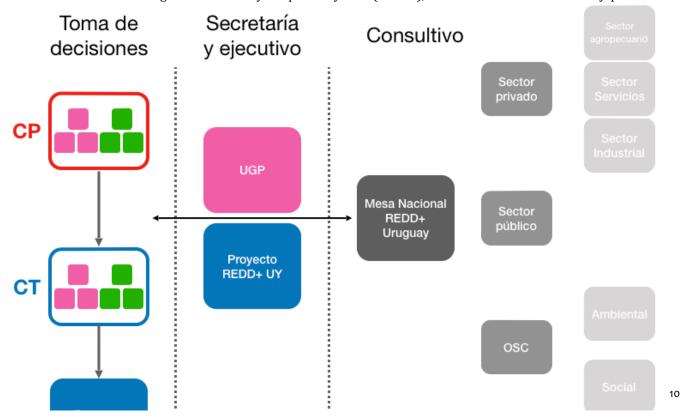


Figure 2. Proposed structure for the composition of the REDD+ (CP is Political Committee; CT is Technical Committee; OSC is Civil Society Organizations).

decree and is aimed at "...the coordination and planning of the necessary public and private actions to prevent risks, mitigate and adapt to climate change." In May 2018, the REDD+ project was presented to the SNRCC coordination group, and it was decided that the REDD+ Round Table would operate under that sphere as a specific working group, which will particularly include the participation of civil society, academia and the private sector, REDD+ interest groups that do not usually participate in the SNRCC areas of operation. The proposed structure for the composition of the REDD+ Round Table within the framework of the SNRCC and the REDD+ institutional mechanism is presented in Figure 2.

Sector meetings have been held with key actors of Uruguayan civil society, in order to incorporate topics of gender, (socially and environmentally) vulnerable communities, causes of forest degradation and deforestation, as well as other relevant aspects tied to the construction of the REDD+ Strategy in Uruguay. Three meetings were held in July 2017, including one meeting with environmental NGOs, a second meeting with indigenous and Afro-Uruguayan associations, and the last meeting with rural production associations. During these meetings, we informed participants of local consultation and participation opportunities and identified the initial key representative organizations of civil society from around the country to be invited to the participation and consultation workshops.

For the feedback opportunities with local institution staff and civil society organizations, an easy-to-read document was created to present the readiness phase of the REDD+ Strategy in Uruguay, including information on the overall program, its implications for the country and the importance of the duly informed participation of all relevant sectors and actors throughout the country. This document was disseminated along with a presentation by the REDD+ team and was also used to spread information to interest groups that for one reason or another were unable to attend the presentations.

With the information provided in the feedback sessions with subnational ministry staff and members of civil society, seven participation and consultation events were planned to discuss benefits and the causes of forest degradation and deforestation, which will be held between 2017 and 2018, and are described below.

# **CONSULTATION PROCESS**

What evidence demonstrates that consultation processes at the national and local levels are clear, inclusive, transparent, and facilitate timely access to information in a culturally appropriate form?

What evidence is there that the country has used a self-selection process to identify rights holders and stakeholders during consultations?

Before inviting them to participate in the consultation workshops, we met with institutional representatives from government, NGOs and local producer groups to generate a preliminary mapping of the specific actors for each area. During this exercise, the REDD+ project's emphasis is on identifying vulnerable groups that may not be considered by these representatives and include them within the invitation to the consultation process.

The contacts provided from these meetings are used when convening the consultation workshops, with an emphasis on communicating with vulnerable actors through phone calls and special follow-up.

During the workshops, we took special care to adapt the information and communication strategy to the culture of the local circumstances and participants. For this, we identified the participating groups ahead of time so as to adapt the information used in terms of technical language, communication strategies, etc. The REDD+ concepts were presented

in a comprehensible manner, using everyday examples related to the local context (e.g., local ecosystems, local forest uses, social and environmental protections, etc.).

During the introduction to REDD+ and before breaking off into sub-groups to work, cards were distributed with the definitions of the key concepts presented (i.e. degradation and deforestation). This way, the participants were able to consult these cards or the facilitators during the sub-group activities. During the sub-group activities, special support was given to those with literacy issues so that they could adequately give their opinion in the identification of the multiple causes and benefits related to the forest.

No feedback surveys were conducted. However, statements of participants expressing their satisfaction which the workshop organized by REDD+ have been documented. Finally, a report was prepared following each workshop and sent to all participants for reviewing purposes. Questions received were answered and followed up on by e-mail.

What evidence is there that Indigenous Peoples institutions and decision-making processes are utilized to enhance consultations and engagement?

Explicit mechanisms and processes have been used to invite minorities to participate in the workshops. In the case of indigenous peoples, we have invited them to participate through existing organizations at the national level and in the towns where the workshops are held. Due to the interest shown by these organizations, there was a significant presence of the organizations' representatives, with almost 10% of total participants in the Rocha workshop and 25% of total participants during the Paysandú workshop. In addition, there is a parallel process that will run until the end of this year to identify the links between these groups and native forests. The validation of this process will be held in the same location and back to back with the final consultation workshop for the year. The location was chosen because it is the place with highest percentage of people with indigenous ancestry.

# What evidence is there that consultation processes are gender sensitive and inclusive?

The consultation workshop reports show a clear balance in participation, with nearly 50-50 participation between men and women. However, considering that the attendance is not representative of active participation, during preparation for the workshops, the facilitators were trained to encourage and give special attention to female attendants. During the coordination meetings with workshop facilitators and local key participants that helped in the organization and facilitation of the workshops, particular emphasis was given to the importance of women participation and generation of a proper context and incentive for them to voice their opinion during the meeting. Facilitators were asked to put effort on creating opportunities for women to participate, and to pay special attention to overcome common situations such as women speaking less loudly or imperatively or men speaking over women, etc)

Coordination of transportation logistics was specially taken care of to facilitate the participation of rural women in the departments where the activities were carried out. This was part of the coordination activities held with departmental representatives from MVOTMA and MGAP prior to executing the workshops.

# GENERAL DESCRIPTION OF THE CONSULTATION PROCESS

Regarding the consultation and participation process, we are currently winding up the first phase, which consisted of disseminating the REDD+ Strategy readiness process, including consultation at the territorial level regarding co-

benefits of the forest and the causes of native forest degradation and deforestation, as well as the definition of needs for training and strengthening the different key actors identified in the REDD+ Strategy readiness framework. This first phase began during the last quarter of 2017 and is expected to continue until October 2018. To date, 5 participation activities have been carried out, bringing together over 180 participants from 8 departments around the country.

In September and October 2017, 2 workshops were held on the benefits and causes of coastal forest degradation and deforestation. The first workshop was held on September 30<sup>th</sup> with the participation of 30 people including protected area managers from SNAP, representatives of city government and civil society organizations from the departments of Rocha, Maldonado and Canelones. The second workshop was focused on the coastal forest of the East coast: Colonia, San José and Montevideo, with the participation of over 20 representatives of subnational and city governments and civil society organizations. A report on each of these events was prepared and distributed to participants to provide feedback on and a synthesis of the workshops; this report also served as input for the project technical team's analysis of causes.

During April and May 2018, three new participation and consultation activities were performed. This time the activities were carried out on the departmental level in Rivera, Paysandú and Rocha, and aimed to ensure a territorial balance between the different zones and forest types in Uruguay. These participation and consultation activities convened over 120 participants from different sectors of civil society and public and private institutions: environmental organizations, indigenous groups, rural development societies, agrarian cooperatives, forestry companies, as well as university representatives, departmental government representatives, national representatives from different ministries, and the Bureau of Planning and Budget.

For the 3 workshops, preparation meetings were held with the local MVOTMA and MGAP teams. In the case of Rivera and Paysandú, these meetings also included representatives of departmental government, and in the case of Rocha, the participation of representatives from the Regional University Center of the East of the University of the Republic. These encounters served to expand the list of actors and representatives to be invited to the consultation workshops on causes and benefits, and this clearly favored the high level of attendance at each event.

For example, in the case of Paysandú and Rocha and as a way to ensure the specific participation of indigenous group representatives, the REDD+ team contacted the national representatives of the Charrua National Council (CONACHA) and asked them to identify their representatives in the different departments where the consultation activities would be held. This helped improve assistance and achieve a good representation of these groups at the local events.

In the 3 departments where the consultation workshops were held, the following causes of deforestation were identified: substitution of forest for crops (namely rice and soy) and afforestation and to expand urban centers. On the other hand, the main causes of degradation posited were the use of agrochemicals, the expansion of invasive exotic species and the cutting down of native species around residential areas.

In the 3 consultation events, the lack of control and articulation by institutions with jurisdiction over native forests was highlighted as an essential factor. This could be related to a lack of adequate dissemination of the different controls in place.

The activities also served as the basis for identifying benefits associated with the forest ecosystems. Those most cited by the participants were the buffering of floods in urban areas, maintenance of water quality and the promotion of nature and rural tourism, as well as the role it plays in livestock and beekeeping within the production sector which directly uses the native forests. The reports generated from the REDD+ consultation workshops have been disseminated among participants for their validation and enhance the transparency of the process.

In September and October 2018, two workshops are scheduled in the departments of Tacuarembó and Durazno (to be confirmed) in order to conclude the first phase of the REDD+ participation plan: 10 out of 19 departments in the country and direct contact with more than 250 people in the consultation events. This process has already provided us with important input that is being used to create the ENREDD+ and the document to define the causes of deforestation and degradation.

The next phase in the plan consists of a consultation process on policies, actions and measures and partial and total drafts of the ENREDD+ document. This phase is expected to take 15 months and will be carried out in two stages.

During the *first stage* of consultation, 18 subnational and one national workshop will be held. Participation in the subnational workshops is estimated at 40 to 70 people, and the national workshop is expected to have 50 to 80 participants. The 18 subnational workshops will be distributed around 6 regions so as to represent the socioeconomic and environmental realities of the country and each of these 6 regions will host three workshops. The first workshop will be an informative and consultation session; the second will provide feedback on the actions since the first workshop and consultation on the progress made from the first session. The third session will provide feedback on the outcomes of the previous consultation sessions. For each of these workshops, prior coordination will focus on ensuring a high level of participation, for example, facilitating the participation of women, youth and representatives of indigenous groups, in the same line as in the participation workshops held to date. As was described in the previous section of this report, special emphasis has been placed on the participation of women, youth and representatives of indigenous descendant's organizations.

In this phase, the workshop participants will be informed of and consulted regarding the progress made by the REDD+ National Strategy, that is, the general conceptual progress and specific progress related to concrete policies and measures to be included within the strategy. At this time, the fundamental goal is to identify potential risks, impacts and benefits of the strategy in general and the different measures in particular. Likewise, we will inquire on the potential environmental management measures tied to the risks, impacts and benefits identified. In the same line, there may be consultation on the general framework of benefit-sharing, while making sure to not generate any false expectations about eventual compensations. Participants will also be asked to comment on the drafts, and their comments will serve as input for the new revised drafts.

The second stage consists of the presentation of the SESA process and consultation within a national workshop. This will require a Report on SESA and one on ESMF. Given that SESA is a participatory but also analytical instrument, the SESA Report will contain the analysis performed by the corresponding professionals on the expected risks and impacts of the ENREDD+ strategic actions and activities, as well as the environmental and social management measures including safeguard instruments. The SESA Report will also include the Regulatory and Institutional Framework of the country, and the gap analysis between this framework and the WB safeguards. The ESMF will take this input from the SESA and must propose, among other things, measures to bridge these gaps, as well as institutional adaptations proposed by the Uruguay team for the social and environmental management of ENREP.

# INFORMATION SHARING AND ACCESSIBILITY OF INFORMATION

How have national REDD+ institutions and management arrangements demonstrated transparent, consistent, comprehensive and timely sharing and disclosure of information (related to all readiness activities, including the development of REDD+ strategy, reference levels, and monitoring systems) in a culturally appropriate form?

Regarding the Reference Levels and Monitoring Systems, the section below on "Use of historical data" includes a list of interviews and methodology related to consultations with different sectors.

What evidence is there that information is accessible to stakeholders (e.g., in a format and language understandable to them) and is

# being received?

During this phase, strides have also been made in the design and completion of REDD+ communication and outreach elements. As mentioned in the introduction, an effort must be made to increase the different stakeholders' familiarity with the forest. To do this, it was decided to develop a series of short audiovisuals to generate awareness and context for the consultation workshops on the policies, actions and measures of the ENREDD+ to be held starting around the middle of the first quarter of 2019. At the same time, for on-site work with the different stakeholders, we are in the process of hiring a company to design a set of different communications materials that will help generate a graphic context for the project to be easily identified during the 2019 participation activities. The graphic design elements obtained from the company to be hired for this purpose will be used in a series of periodic publications on the REDD+ project's progress and outcomes throughout 2019.

We have already contracted the service to generate audiovisuals, and the audiovisual content is already being developed. These audiovisuals consist of short videos (3 or 5 minutes) including animations to present the general aspects of Climate Change, REDD+, environmental and social safeguards in a simple manner, with an emphasis on the relationship between the production systems and ecosystems at the territorial level, including overarching aspects of connectivity, landscape, biodiversity conservation, in order to generate a framework that favors participation in the scope of the consultation workshops. These audiovisual pieces are expected to be used for dissemination through the platforms and networks of both ministries and in formal and informal training activities developed by the project in parallel to the consultation and participation activities.

What channels of communications are being used to ensure that stakeholders are well informed, especially those that have limited or no access to relevant information?

The project is sustained upon Rural Development Round Tables, which have proven to act at the departmental level as driving forces to provide information to local groups with more limited access. We have achieved fluent communication with the departmental representatives of MGAP, and this has helped the information arrive more effectively to these special interest groups in the departments (subnational level) where the consultation and participation activities are carried out.

In addition to the mechanisms indicated above, it is important to note that Uruguay has Law 18,381 (passed in October 2008) on the Right to Access Public Information, which promotes the transparency of the administrative function of public entities and guarantees the right to access information. Information may be requested in writing and the consulted entity is required to allow access to the information immediately if possible or within a maximum of 20 days. Article 19 of this law creates the Public Information Access Unit, a specialized area responsible with protecting the right to access public information (uaip.gub.uy).

# IMPLEMENTATION AND PUBLIC DISCLOSURE OF CONSULTATION OUTCOMES

How are the outcomes of consultations integrated (fed into, disseminated, publicly disclosed and taken into account) in management arrangements, strategy development and technical activities related to reference level and monitoring and information systems development?

At the end of the workshops, participants were asked to assess the participation activity, and their comments were taken into consideration to improve the design of the workshops so as to improve the clarity of the concepts and the overall design of the participation activities. Moreover, upon completion of the workshops, the participants indicated relevant topics for the generation of training activities within the framework of the REDD+ project, which will be used as input for the definition of the training schedule to be carried out in 2019.

The REDD+ team has systematically provided feedback on all consultation activities to their participants through the Rural Development Round Tables in each department where the workshops were held and by e-mail to all participants and those who were invited, but could not attend. In addition, we requested institutional references to outreach the results of the workshops both through internal briefings in their institutions and through other forums and media within their communities.

Likewise, the information taken from the consultation activities has been considered by the REDD+ team for incorporation in the analysis of the causes of degradation and deforestation.

# REDD+ STRATEGY PREPARATION

# 2.2.A. ASSESSMENT OF LAND USE, LAND-USE CHANGE DRIVERS, FOREST LAW, POLICY AND GOVERNANCE

Does the summary of the work conducted during R-PP formulation and preparation present an analysis of recent historical land-use trends (including traditional) and assessment of relevant land tenure and titling, natural resource rights, livelihoods (including traditional/customary), forest law, policy and governance issues?

The report on the analysis of the causes of deforestation and degradation and the barriers to conservation, sustainable management and the increase in native forest carbon stock in Uruguay has made considerable progress since the proposal formulation and preparation phase. Land use change maps are needed in order to complete the report as they will provide quantitative information that we still don't have in the country. Progress made and expectation for completion of these maps is reported below.

The analysis work began with a bibliographic review at the national level, collecting the available information generated over the years. As mentioned in the introduction of this report, there are still important gaps regarding the situation of native forest in Uruguay, particularly regarding the threats associated with degradation and its expansion. Therefore, the bibliographic review was accompanied by a consultation with native forest experts, the country's key actors in the forest policy management (now determined by the Forest Law, and the technical staff of the Forest Department) and enriched by the experience of private technical staff working in this area. Finally, after completion of the first draft and detection of the need for a more in-depth analysis of the underlying causes, an international consultation was performed with the goal of performing this analysis.

The analysis helped establish that the processes that directly produce deforestation and degradation in Uruguay are: the expansion of the agricultural and forest borders, agricultural activity, illegal logging, infrastructure projects, urbanization or the extraction of aggregate. These causes are distributed according to the type of forest and region of the country. The following underlying causes are analyzed: economic and cultural drivers, gaps in the legal framework, limited technical and financial resources which indicated areas for improvement in the oversight (particularly with respect to the degradation process), as well as the main interrelated factors that affect these processes.

While the analysis is qualitative, there is still no quantification of the degradation and deforestation trends in Uruguay and its territorial distribution. The quantification of causes is fundamental to broadening our knowledge of the current situation and being able to prioritize those that more greatly affect the native forest. This will allow us to set the basis for the measures to be proposed in the REDD+ strategy. We hope to have this information as part of the

activity data generation process being developed. We have found problems specific to the mapping of the forest ecosystems in Uruguay, which have significant differences from other ecosystems in the region and world (for example, the Riparian forest feature that intensifies the errors of the "border effect"). This process is described in further detail below in the sections on FREL and SNMF.

As a result of the progress made up to now, the report recognizes that the native forest in Uruguay is suffering from degradation due to the invasion of invasive exotic species (IES), which is highly significant in some regions and could expand to other regions of the country. For this reason, it is necessary to broaden research on the information provided by the lots within the national forest inventory. Within the framework of the preparation process, during the second half of 2018, a lot of work will be done to collect and generate information to help understand the process of degradation due to the invasion of IES, its current scope and the potential for territorial expansion.

# PRIORITIZATION OF DIRECT AND INDIRECT DRIVERS/ BARRIERS TO FOREST CARBON STOCK ENHANCEMENT

How was the analysis used to prioritize key direct and indirect drivers to be addressed by the programs and policies included in the REDD+ strategy?

The analysis is still underway. There are two pending elements that are key to being able to prioritize the causes of deforestation. The first is the completion of the change in land use map, which will cover the 2000, 2009 and 2016 periods. The section below on reference levels presents information on the progress made in this area and expected timeline. The second element of analysis is derived from the first and consists of the identification of land uses in places where forest cover losses are recorded.

These two elements, along with current consultation processes on the causes of deforestation and degradation within the framework of the workshops described above, will be used to prioritize the programs and policies to be considered for inclusion in the REDD+ national strategy.

Did the analysis consider the major barriers to forest carbon stock enhancement activities (if appropriate) to be addressed by the programs and policies included in the REDD+ strategy?

To achieve an increase in carbon reserves, it will be necessary to identify opportunities for increasing forest cover and this will require identification of the forest as an integral part of the national productive sphere and define elements to enable this integration. The activity to increase stock has been prioritized by the REDD+ Technical Committee and is in the process of designing a work team and methodology to carry out the research work aimed at improving knowledge of the ecological variables that favor or condition an increase in forest cover. At the same time, a methodology is being formulated and a work team is being hired to identify how the abovementioned ecological, social and economic factors interrelate. We expect to have the team working by the end of 2018.

The outcomes of this work will be fundamental to the formulation of the REDD+ national strategy.

# LINKS BETWEEN DRIVERS/BARRIERS AND REDD+ ACTIVITIES

What evidence demonstrates that systematic links between key drivers, and/or barriers to forest carbon stock enhancement activities (as appropriate), and REDD+ activities were identified?

As mentioned in the previous point, there is research underway that will help identify links with the barriers to increasing reserves and opportunities to expand coverage. As also mentioned previously, to find systematic links on

the causes we must wait for the outcome of the change in use maps and an analysis of the areas of forest cover loss, which is expected around the end of 2018.

#### ACTION PLANS TO ADDRESS NATURAL RESOURCE RIGHTS, LAND TENURE, GOVERNANCE.

Do action plans to make progress in the short-, medium- and long-term towards addressing relevant, land-use, land tenure and titling, natural resource rights, livelihoods, and governance issues in priority regions related to specific REDD+ programs, outline further steps and identify required resources?

As mentioned previously for other questions, the country is still in the preparation stage and has not yet defined the priority regions for the specific REDD+ programs. However, it can be noted that Uruguay is making strides in the REDD+ project framework.

In Uruguay, there is an ordered registry of the native forests that enter the system of benefits granted by the Government for national and departmental tax exemption, and this information is available at the individual level (for each separate establishment, for each owner) and in analogous (hardcopy) format, making it difficult to analyze and integrate at a different scale, at the basin or country level. The same occurs with the authorization of forest logging or management permits, which are not available in a format that allows for a broader analysis. This information is crucial for knowing where, how and how much the native forests are being exploited in Uruguay under forest management. So it is that, given the need for more operable information, the information will undergo a digitalization process. This will allow for a systemic integration and visualization of the information, which constitutes a fundamental tool for analysis, while facilitating the control and oversight of operations inherent to the forest. The digitalization process will start in August 2018 and is planned to run for a period of 6 months.

Additionally, this digitalization process will be key to helping support research on the impact of management plans and exonerations in the integrity of the native forests. Research based on this information will also make it possible to perform an analysis related to sectoral policies, land uses and other factors. There is also the possibility that these analyses, as well as the identification and prioritization of ecosystem services may result in priority regions for the specific REDD+ programs.

A key element to assessing the outcomes of forest ecosystem governance is the lack of information. We do not have enough scientific-technical information to carry out an assessment at the national level. The project is in the negotiation phase to incorporate within the framework of an agreement with the National Institute of Agricultural Research, lines of research to begin to reveal the status of the ecosystem and define lines of action based on the diagnosis.

# IMPLICATIONS FOR FOREST LAW AND POLICY

Does the assessment identify implications for forest or other relevant law and policy in the long-term?

The assessment, along with the current consultation process, have been useful for preliminary identification. The result of some research in progress must be completed in order to measure the implications in depth and make recommendations with respect to the forest policies and laws in the long term. This should be done by the end of 2019.

# 2.2.B. REDD+ STRATEGY OPTIONS

# SELECTION AND PRIORITIZATION OF REDD+ STRATEGY OPTIONS

Were REDD+ strategy options (prioritized based on comprehensive assessment of direct and indirect drivers of deforestation, barriers to forest enhancement activities and/ or informed by other factors, as appropriate) selected via a transparent and participatory process?

Uruguay currently has legislation and government actions to protect the native forest. This legislation and the efforts made are the basis upon which efforts can be built during the REDD+ readiness phase in Uruguay and the REDD+ (ENREDD+) National Strategy. At present and according to the preliminary calculations of the REDD+ team, the country allocates, only as tax waiver in the form of tax exoneration for the owners of native forest registries, around 1.5 million dollars a year to forest protection. This is in addition to monitoring, control and follow-up efforts on the native forest management systems. The country must determine the structure of ENREDD+ to reinforce some significant elements of forest governance in Uruguay and reconsider other elements that arise from the analysis of the causes of deforestation, the analysis of current governance and the measures to preserve ecosystem services associated with priority forests.

With respect to the REDD+ activities, a preliminary analysis helps to determine in advance that the main problems faced by the Uruguayan native forest are related to degradation, primarily the invasion of invasive exotic species, and conservation, due to the very low coverage under the protected area management system<sup>1</sup>. Coincidentally, these REDD+ activities are difficult to implement. The work potential to reduce deforestation must still be evaluated, as there is still no exact information about the magnitude and distribution of deforestation in the country. Finally, the activities to manage and increase carbon stock are seen as having high potential, the first based on existing information with respect to other countries, and the second for possible interactions with production activities in both rural and coastal areas.

In general terms, the ENREDD+ hopes to achieve a REDD+ mechanism for forest management aimed at enhancing its benefits to the rural production sector. This can be seen in the form of water flow management, the provision of shade, pasture resilience and other elements already known or to be studied by REDD+. At the same time, the carbon removed may be used as a source of neutrality for a better international positioning of agricultural and livestock products.

The multiple benefits of the forest shall be considered a fundamental aspect in the prioritization of the investment of limited resources. Therefore, the readiness phase places special emphasis on identifying those benefits from a community, public and private perspective. This could lead to proposals to modify the distribution of existing and future resources.

The coastal and urban sector has woodland communities with differing characteristics according to the work area. While a large percentage of these areas are composed of invasive exotic species that have been planted to populate the coastal zone, these woodland communities are now associated with the local culture. During the development of the ENREDD+, different priorities are being analyzed in terms of the ecosystem services, potential for restoration and cultural factors, among others. For example, the substitution of a pine plantation in the coastal zone may be done to improve adaptation to climate change, in some cases regenerating dunes and non-woodland coastal vegetation, and in others, with the use of national species that adapt better to the current socio-environmental circumstances. The

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<sup>&</sup>lt;sup>1</sup> It is important to distinguish between the existing legal protection for the entire native forest and the protection granted by inclusion in a protected category equivalent to categories I and II of the UICN.

potential restitution of ecosystem services with novel ecosystems is one of the elements being analyzed in the ENREDD+ formulation phase.

The population concentration in the coastal zone and the importance that these changes may have on cultural and social aspects means that the coastal woodland communities, as well as urban communities, may also help send a message to the population and encourage different production sectors (i.e., tourism, banking, etc.) to neutralize part of their emissions with this highly visible woodland communities, within a national system that provides payment for results.

At the time this mid-term report is being prepared, ENREDD+ is still a first draft, and has strategic lines and expected results, with varying degrees of progress according to the strategic line. The preliminary strategic lines are the following:

- 1) Governance
- 2) Financial mechanisms
- 3) Incentives mechanisms
- 4) Forest management
- 5) Control and regulation of standards and plans agreed upon with the authorities
- 6) Research
- 7) Environmental citizenship
- 8) Information system (multidisciplinary)

The first internal draft is expected to be available for the second semester of 2018 so as to have a draft that can be used for the SESA process at the beginning of the last quarter of the year. Once the ENREDD+ has entered the SESA process, the process will go back and forth between the comments received and the new drafts to be prepared by the REDD+ project and agreed upon within the different divisions of the REDD+ Technical Committee and also discussed within the sphere of the REDD+ National Round Table. The National Native Forest Strategy, which was completed at the beginning of 2018 within the framework of cooperation between Uruguay and Germany, constitutes an important input for the creation of the ENREDD+.

In addition to the dialogue and consultation mechanisms, we hope to have other sources that will generate relevant information for the definition of the ENREDD+. In terms of other existing information sources within the General Forestry Department, the data is difficult to process as it is still recorded in hardcopy form. Since the beginning of this project, work has been done to digitalize and process these data to be able to analyze them and draw conclusions. Some examples are the recorded violations folder, which underwent processing and digitalization work to draw some conclusions on the control actions; while another example is the information contained in the native forest management and records folders. As described in section 2.3, a consulting service is being hired to digitalize this information, and this will help perform fundamental analyses regarding the native forest governance areas within the ENREDD+. Work has also been done on the data from the National Forest Inventory, as also described in section 2.3 below.

As well as the use or processing of information existing in different formats, the project is expected to generate new information. The details of this information can be found in section 2.3 in the description of the elements expected to be achieved from the agreement with INIA. The objective of the survey to be performed in the corporate sector (private sector and autonomous entities) is to know their perception of climate change, carbon neutrality for greenhouse gas emissions, forms of compensation and potential interest in participating in a national emissions compensation system. A greater understanding of the knowledge and perception of the private sector is expected to help develop an ENREDD+ with greater possibilities of being integrated not only by actors related to the carbon "supply" but also by those related to national demand.

Were the expected emissions reduction potentials of interventions estimated, where possible, and how did they inform the design of the REDD+ strategy?

The reduction or removal potentials of the REDD+ national strategy have not yet been estimated. We hope to have the necessary elements for this estimate by the end of 2019.

# FEASIBILITY ASSESSMENT

Were REDD+ strategy options assessed and prioritized for their social, environmental and political feasibility, risks and opportunities, and analysis of costs and benefits?

This activity is scheduled for the end of 2018 and for 2019, as we must first make progress in the REDD+ strategic options.

# IMPLICATIONS OF STRATEGY OPTIONS ON EXISTING SECTORAL POLICIES

Have major inconsistencies between the priority REDD+ strategy options and policies or programs in other sectors related to the forest sector (e.g., transport, agriculture) been identified?

This analysis is part of the REDD+ national strategy formulation process. Technical staff members have been hired to assist in this process. On the other hand, the SESA process, which is expected to have a strong participation component during the end of 2018 and 2019, plays a fundamental role in the identification of these elements.

Is an agreed timeline and process in place to resolve inconsistencies and integrate REDD+ strategy options with relevant development policies?

Are they supportive of broader development objectives and have broad community support?

Regarding these two questions, we can once again mention that the country is in the readiness phase, and at the moment this mid-term report was being written, the identification of inconsistencies was not yet complete. The SESA process is expected to help both identify and resolve inconsistencies with development policies and to find objectives that have community support.

# 2.2.C. IMPLEMENTATION FRAMEWORK

# ADOPTION AND IMPLEMENTATION OF LEGISLATION/REGULATIONS

Have legislation and/or regulations related to REDD+ programs and activities been adopted?

As we are in the middle of the readiness phase, no laws have been adopted yet within the framework and specifically for the REDD+ activities. However, as mentioned in the introduction, the REDD+ project is framed within an institutional situation that is stable and operational in terms of climate change in Uruguay. Therefore, the necessary framework for the adoption of laws or regulations related to REDD+ programs and activities has already been established. In this sense, on November 3, 2017, the Executive Branch issued Decree No. 310/017, which passed the National Policy on Climate Change (PNCC) and the First Nationally Determined Contribution (NDC)<sup>2</sup>, the latter constituting the implementation instrument for the PNCC as established in Paragraph 23. Both the PNCC and the NDC were created within the framework of the National Climate Change and Variability Response System (SNRCC).

<sup>&</sup>lt;sup>2</sup> Executive Branch Decree 310/017. Available at: https://www.impo.com.uy/bases/decretos-originales/310-2017

The PNCC is a strategic and programmatic instrument aimed at year 2050, which seeks to incorporate the climate change approach in all spheres and sectors of economy and society, promoting sustainable development for the country that is more resilient and lower in carbon. It includes six dimensions: Governance, Knowledge, Society, Environment, Production and Development and Implementation. Throughout its text, the PNCC establishes clear links to the country's natural ecosystems, in several of its dimensions, and determines the framework of action on climate change.

Paragraph 12, with respect to the Environmental Dimension of the PNCC, establishes that it will promote "...the conservation, recovery and restoration of the natural ecosystems and the provisions of ecosystem goods and services, based on adaptive management and through sustainable production and consumption practices, considering climate change and variability." Among the lines of action proposed to meet this objective are: the promotion of actions for the "...recovery of the native forest, wetlands and pastures, to favor the provision of ecosystem goods and services..."; the promotion of "...sustainable production and consumption patterns in natural ecosystems, considering climate change and variability" and the generation and dissemination of "...information on carbon sequestration in wetlands and other natural ecosystems."

Moreover, paragraph 16, on the policy's Production Dimension, establishes that it will promote "...the reduction of the intensity of greenhouse gas emissions and the increase in carbon sequestration in agricultural production systems...in order to add value, as well as to maintain and/or access international markets." Among the lines of action to meet this objective are: the generation and dissemination of "...information on carbon sequestration in the soil, in forestation, in wetlands and in other natural ecosystems related to food production" and the promotion of "...management practices for agricultural production systems, including forestation, that promote carbon sequestration."

Finally, we can also highlight what is established in paragraph 26, on the policy's development and implementation: "Priority will be given to the development of strategies and plans for implementation of this Policy such as, among others, the National Agricultural Adaptation Plan, the National Coastal Adaptation Plan, the National Adaptation Plan in Cities and Infrastructures and the Strategy to Reduce Emissions from Deforestation and Forest Degradation."

As described in the previous section on the ENREDD options, these interactions between the agricultural production systems, the forest ecosystems and carbon sequestration are fundamental to the vision of ENREDD's role in Uruguay.

The NDC of Uruguay was presented before the United Nations Framework Convention on Climate Change on November 8, 2017<sup>3</sup>, including the objectives to mitigate climate change, the main mitigation measures to contribute to the achievement of these objectives and the main adaptation measures to adverse effects of climate change.

Uruguay's contribution is focused on being able to develop with the lowest possible intensity of GHG emissions, "decarbonizing" its economy over time and also adapting, by reducing its vulnerability and increasing its resilience, doing all of this in a way that does not threaten food production.

Given that Uruguay's emissions profile is strongly marked by emissions related to food production, the NDC presents specific objectives of emissions intensity tied to the production of beef, as well as objectives for the land use, land use change and forestry sector (LULUCF)).

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<sup>&</sup>lt;sup>3</sup> Oriental Republic of Uruguay First Nationally Determined Contribution to the Paris Agreement. November 2017. Available at: http://www4.unfccc.int/ndcregistry/Pages/Search.aspx?k=uruguay

Among the objectives established specifically for the LULUCF sector, two of these are directly related to the native forest and, therefore, the REDD+ National Strategy will consider actions to meet this objective in particular and the nationally determined commitments in general.

#### These objectives are:

- Unconditional objective: "To maintain 100% of the native forest surface area of 2012."
- Conditional on additional specific means of implementations objectives: "Increase the native forest surface area of 2012 by 5%."

It should be noted that the NDC also mentions that "...during the last few years, degradation processes have been identified in the country's native forests, and this problem will be addressed through the REDD+ Strategy that is being developed in Uruguay. So it is that, within the framework of this Strategy, it is expected not only to increase carbon stock for the restoration of degraded areas, but also to identify opportunities to increase stock by increasing the native forest surface area. This explains the conditional objective defined by Uruguay for the native forest...."

This description of the legal framework shows that ENREDD+ already has a general framework in which it may be established and that the vision presented above is aligned with this general framework. Work still needs to be done, in both the preparation and implementation phases, to carry forward with the changes, reforms and new regulations, standards and even laws, which will help reverse the existing causes of deforestation and degradation and achieve conservation and an increase in carbon stock based on an increase of forest surface area. These changes will be presented in the ENREDD+ around the middle of the second half of 2018 in a first draft and around mid-2019 in more advanced form.

# What evidence is there that these relevant REDD+ laws and policies are being implemented?

At the moment, and in the middle of the readiness phase, there is no evidence of the application of specific laws and policies on REDD+. There is, as mentioned above, a tax exoneration system associated with the maintenance of forest cover, which represents a valuable precedent for the future implementation of REDD+ policies in the country.

This system is being analyzed to assess its effectiveness in maintaining the integrity of the forest ecosystem. Based on the results of this analysis and the exploration of other existing management tools at the international level, potential adjustments to the tax exoneration system will be determined according to the possibilities provided by a mechanism such as REDD+.

#### GUIDELINES FOR IMPLEMENTATION

What evidence is there that the implementation framework defines carbon rights, benefit sharing mechanisms, REDD+ financing modalities, procedures for official approvals (e.g., for pilots or REDD+ projects), and grievance mechanisms?

At the moment, and in the middle of the readiness phase, there is no evidence regarding these mechanisms. We can report that a multidisciplinary team has been put together with experts on law, finance and public policy in order to define and develop these mechanisms.

#### BENEFIT-SHARING MECHANISMS

What evidence is there to demonstrate benefit sharing mechanisms are transparent?

At the moment, and in the middle of the readiness phase, there is no evidence regarding these mechanisms. We can report that a multidisciplinary team has been put together with experts on law, finance and public policy in order to define and develop these mechanisms.

# NATIONAL REDD+ REGISTRY AND SYSTEM MONITORING REDD+ ACTIVITIES

Is a national geo-referenced REDD+ information system or registry operational, comprehensive of all relevant information (e.g., information on the location, ownership, carbon accounting and financial flows for sub-national and national REDD+ programs and projects), and does it ensure public access to REDD+ information?

As indicated in point 2.2.A and below in point 2.4, the DGF has a native forest registry containing historical data on the registered forests. It is estimated that the registered forests represent 50% of all forests existing in the country. This registry also shows the forests for which the owners have receive tax exonerations and the forests for which authorized management and logging permits have been issued. This information is only available in hardcopy and we have begun to hire a company that will be responsible for digitalizing part of the registry during the second half of 2018 (for the years 2000 to 2017).

As of 2019, we also expect to hire consulting for the development of a database and interactive website that will allow owners to register online, as well as submit applications for management and logging permits and obtain for tax exoneration certificates.

This system will be a fundamental starting point for the registration of geo-referenced information for the REDD+ program.

# 2.2.D. SOCIAL AND ENVIRONMENTAL IMPACTS

#### ANALYSIS OF SOCIAL AND ENVIRONMENTAL SAFEGUARD ISSUES

What evidence is there that applicable social and environmental safeguard issues relevant to the country context have been fully identified/analyzed via relevant studies or diagnostics and in consultation processes?

This process is underway (see the following two subsection). As described in section 2.1 above, the consultation process has begun in parallel to the performance of a situation diagnostic. We are waiting for the last two workshops to be held to process the integrated outcomes on the direct causes of degradation and deforestation, as well as the related benefits at the local level, for both the different types of native forest and the communities and actors linked to them. These workshops have shown to be of great importance to boosting the analysis of the direct and underlying causes at the national level being developed by the REDD+ technical team. Once the remaining workshops scheduled for this year have been completed, the resulting reports will be used to enhance the analysis of causes, which is expected to be finalized during 2018.

In parallel, the REDD+ team is preparing a report of vulnerable minorities for the REDD+ project with special emphasis on indigenous peoples and Afro-descendant communities, and this is expected to be complete in September 2018. Once this report is finalized, it will be submitted to the consideration of two consultation workshops on causes and benefits scheduled for the last quarter of 2018. It is important to note that the decision to present this report in Tacuarembó is due to the fact that it is one of the departments with the strongest representation of the indigenous and Afro-descendant groups in the country, and is one of the departments, along with Artigas, where over half the population has indigenous roots.

The high level participation and multiplicity of approaches seen in the REDD+ participation and consultation workshops have been identified as key inputs for identifying and then assessing the social and environmental impacts of the ENREDD+ that must be incorporated within the Environmental and Social Management Framework.

Likewise, the workshops performed up to now have provided valuable information that temporarily help identify training actions on best practices related to the native forests, in order to strengthen the multiple benefits and mitigate the social and environmental impacts related to forest ecosystem governance. Moreover, the workshops have

helped define some particularly relevant aspects tied to unique ecosystems such as the palm forests, the coastal psammophile forests or the forest ecosystems associated with the national system of protected areas. All of these have great cultural and production value and are home to native flora and fauna.

Finally, these workshops are enabling the communication of REDD+ throughout the country, such that during the fourth quarter of 2018, so that when we begin to work specifically on the SESA consultation we will have informed participants. In this regard, it should be noted that we are in the final stages of selecting a consultant company for the design and implementation of the SESA and ESMF work plan. The work performed by this company will have the following objective: the formulation and implementation of the SESA process, including the formulation of the SESA Work Plan, the design and implementation of the participation and consultation plan, the development of the report on the SESA process and the formulation of the Environmental and Social Management Framework.

This work will take input from the participation and consultation activities developed up to now and is expected to begin at the end of 2018 and be implemented during the first half of 2019. The consultant company will carry out a three-workshop cycle in five regions of the country, which will convene actors from the entire country and include consultation on policies, actions and measures, and partial and final drafts of the ENREDD+ document. This will help develop a proper assessment of the social and environmental impacts and prepare a first version of the ESMF for the implementation phase of the REDD+ Strategy.

#### REDD+ STRATEGY DESIGN WITH RESPECT TO IMPACTS

How were SESA results and the identification of social and environmental impacts (both positive and negative) used for prioritizing and designing REDD+ strategy options?

The project is in the middle of its readiness phase, and while some consultation workshops have been held on the causes of deforestation and multiple benefits, the SESA has not yet been completed. We have begun the selection of proposals for a company to assist us in the implementation of the SESA process in the last part of 2018 and 2019.

#### ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

What evidence is there that the ESMF is in place and managing environmental and social risks/potential impacts related to REDD+ activities?

The project is in the middle of its readiness phase and does not yet have an ESMF. We have begun the selection of proposals for a company to assist us in the implementation of the SESA process and development of an ESMF. This process will be carried out in parallel to the development of the REDD+ National Strategy by the national technical team.

### 2.3. Reference Emissions Level/Reference Levels

# **DEMONSTRATION OF METHODOLOGY**

Is the preliminary sub-national or national forest REL or RL presented (as part of the R-Package) using a clearly documented methodology, based on a step-wise approach, as appropriate?

Are plans for additional steps and data needs provided, and is the relationship between the sub-national and the evolving national reference level demonstrated (as appropriate)?

The REDD+ project is currently in the middle of the readiness phase in Uruguay. While the Grant Agreement between the FCPF and the Uruguayan government was signed on October 28, 2015, the implementation of the project began in January 2017 and experts are still being hired to boost the team's technical capacities. Therefore, progress has been made on all of the project's components, but there are still important aspects to development in each of these before finalizing the readiness package.

For the development of Forest Reference Emissions Level / Forest Reference Levels, some decisions have been made within the framework of the Technical Committee (TC) of the REDD+ project, which help respond preliminarily to the questions posed. In the first place, it was defined that the FREL or FRL will be national. In terms of the methodology, we are working to define the methodology for the development of the FREL or FRL for each REDD+ activity to be included, considering the characteristics of the native forest ecosystems in the country and change dynamics in those ecosystems, which will be clearly documented as appropriate. We will always take into account the step-wise approach suggestions, which allows the FREL or FRL to be adjusted as new and better information is generated for the estimate of greenhouse gas (GHG) emissions or removals.

Considering that the national forest reference level establishes the point of reference for evaluating the results of emissions reduction or increase in sequestration capacity generated by the implementation of the actions of the REDD+ National Strategy, it must be defined which REDD+ activities will be included in that reference level, the necessary information to be able to estimate GHG emissions and removals associated with each of these and the methodological approach to be followed for that estimate.

In this sense, while the planning of this component's activities for 2017 had proposed the development of a FREL 1 Tier 1 for all REDD+ activities, after an in-depth analysis of the information available at the national level, the REDD+ technical team decided on a different proposal for the project's Technical Committee (TC). So it is that, during a meeting held in September 2017 between the REDD+ team and the TC, they decided that they did not have the necessary activity and emissions factor data to meet this proposal, and therefore they would prioritize the generation of information to be able to develop a first forest reference level for the deforestation, degradation and enhancement of forest carbon stock activities (in existing forest areas and for the increase in native forest surface area).

At the same meeting, they also defined that the reference period to be considered for the FRL of Uruguay would be 2000 – 2016.

# USE OF HISTORICAL DATA, AND ADJUSTED FOR NATIONAL CIRCUMSTANCES

How does the establishment of the FREL/FRL take into account historical data, and if adjusted for national circumstance, what is the rationale and supportive data that demonstrate that proposed adjustments are credible and defendable?

Is sufficient data and documentation provided in a transparent fashion to allow for the reconstruction or independent cross-checking of the FREL/FRL?

Taking into account the same considerations made in the previous point on the current status of project implementation, it is important to point out that many of the activities carried out up to now in the framework of component 3 (FREL/FRL) are directly related to the generation of the necessary historical data to develop the FREL or FRL for each of the REDD+ activities that have been prioritized in this first reference level: deforestation, degradation and enhancement of forest carbon stock (in existing forest areas and for the increase in native forest surface area). Both the data generated and the methodological approaches defined and applied will be constantly documented by the technical team, so that they are available when the Uruguay readiness package is submitted. This will ensure that it has sufficient and transparent data and documentation to be able to independently reconstruct or confirm the FREL / FRL developed.

The following details the activities performed up to now for the purpose of generating (historical) activity data and emissions factors required for the development of the forest reference level for each of the activities that were prioritized in this phase of the Project:

#### Activity data

The information systematized and analyzed by the REDD+ technical team on the activity data available at the national level for the development of the reference level, to be used as the basis for the proposal made to the TC in the abovementioned meeting, was the following:

- Soil cover maps for 2000 2008 2011, prepared by the National Department of Land Planning Directorate
  (DINOT) of the MVOTMA, applying the Land Cover Classification System (LCCS), the MadCat software
  (Mapping Device-Change Analysis Tool) for classification and the e-cognition software for segmentation. All
  of these tools were developed by the FAO.
- Forest cartography 1980 1985 1995 2000 2006 2012, prepared by the General Department of Forestry (DGF) of the MGAP. Available in digital format for the period 2000 2012 (Landsat).
- Survey of land use and change in land use in Uruguay for the period 2000 2016 with the tool Collect Earth, performed by a technical team hired by the DGF and Bureau of Agricultural Programming and Policy (OPYPA) of the MGAP.

In all cases, the methodology applied, the definitions used, the results obtained and their strengths and weaknesses for use in REDD+ were analyzed. The documents containing the outcomes of this analysis are annexed to the REDD+ Project Uruguay 2017 Annual Progress Report, sent to the World Bank in July 2017.

Additionally, interviews were held with the following units and projects:

- a) Forest Governance Division of the DGF, to determine if the information found in the Native Forest Registry, (logging authorizations) in the claims folder and illegal activities folder could be useful in the development of the reference level.
- b) Unique Project Contribution to the development of a sustainable native forest management strategy and its implementation in Uruguay, to determine if the information generated within the framework of the project's research could contribute to the development of the reference level or for the design of the MRV system of the REDD+ project.
- c) General Department of Natural Resources (DGRN) of the MGAP, to verify the existence of maps of other land uses in Uruguay such as agriculture and pastures and to access the information contained in the soil use and management plans and the governance of those plans by the MGAP.
- d) National Protected Areas System (SNAP) of the DINAMA of MVOTMA, to determine the information available on native forests in the SNAP protected areas and other forests in public and private areas under the governance or conservation system, and to verify the existence of a subnational cartography available in connection with the native forest.
- e) Department of Environmental Systems of the Faculty of Agronomy at the University of the Republic, to know the methodology and results of the national map of soil use generated with MODIS, of the partial map generated with Landsat for 2008 and 2009 and the library of spectral firms for pastured under development.
- f) Environmental Information System of the DINAMA of MVOTMA, to determine the information available on the platform and possible complementary methods to determine activity data.
- g) Ide Spatial Data Infrastructure of the President of the Republic, to know the current status of implementation of the fly-over to obtain high-resolution images at the national level, in order to adjust the digital model of the land, surface area, hydrology, water basins, properties and apparent borders.

These interviews were primarily focused on analyzing possible sources of available information to develop the forest reference level, but they also helped us begin to see possible platforms or existing IT systems at the national level to host the information generated by the REDD+ project.

The outcomes of these interviews were:

- the collection of new documents and data related to land use and land use change in Uruguay, which complemented the gathering of existing national information described above;
- the in-depth knowledge of existing platforms to host the information generated by the REDD+ project.

Upon analysis of all available information at the national level, it became clear that new national maps of land use and change in use for the reference period would need to be generated, and these will serve as a source of information on activity data for the forest reference level.

For the development of these maps, FAO was identified as a technical counterpart to assist the REDD+ team on this task, holding technical exchanges to agree upon the objectives and define a work plan, and ultimately signing a work agreement for the implementation of that plan. This Agreement signed was annexed to the REDD+ Project Uruguay 2017 Annual Progress Report, sent to the World Bank in July 2017.

Within the framework of that agreement, which began in June 2017 and will end once the maps have been completed and evaluated, the following activities were performed:

- 1. Ongoing virtual exchanges between the REDD+ technical staff and the FAO experts, to identify possible methodologies and tools for the development of these maps, considering the reality of native forests in Uruguay.
- 2. First FAO expert mission to Uruguay for the week of June 14-28, 2017, with the objective of finalizing the definition of the methodology to be applied for the development of the maps. For this, the mission worked with the REDD+ team, and the First Mapping Workshop for REDD+ was held on July 26, 2017. The objective of this workshop was to work with national experts to agree upon the most appropriate methodology for generating the historical land use and change in use maps for the period 2000 2009 2016. At this workshop, the following aspects were agreed upon:
  - a) In connection with the definition of forests for the maps: this will be adapted to the minimum mappable unit with the sensor being used in each case (Landsat, Sentinel or other).
  - b) The use of free images of clouds will have priority for the period from November to February: the types will be native forest and non-native forest (pasture, crops, wetlands, water, settlements and forest plantations).
  - c) The following methodologies will be used in the two pilot areas defined in this workshop: annual classification and post-classification comparison and multi-temporal classification.
- 3. Ongoing virtual exchanges between the REDD+ team and FAO to monitor progress in the assessment of both methodologies and the preliminary outcomes.
- 4. Second FAO expert mission to Uruguay for the week of September 4-8, 2017, with the objective of presenting the outcomes of the assessment performed and to select the methodology to be applied in the national maps. The mission worked with the REDD+ team, and the Second Mapping Workshop for REDD+ was held on September 6, 2017. The same national experts that participated in the first workshop were in attendance. The results of the application of both methodologies in the defined pilot areas were presented, and the following aspects were agreed upon:
  - a) National experts understood that for the situation of Uruguay, it would be better to apply the annual classification and post-classification comparison methodology, as long as the maps can be generated as automatically as possible, so that they can be compared with each other and changes can be identified. Nevertheless, as suggested by the FAO experts, who understand that it is better to apply the multi-temporal methodology for the analysis of changes and that this methodology is more widely accepted at the

international level, the national maps will be generated using both methodologies. The multi-temporal methodology was also recommended by the World Bank expert, as detailed below. The annual maps will be generated by the REDD+ team and the multi-temporal map will be made by FAO.

- b) Maps will be made for the years 2000 2009 2016.
- c) The 2016 annual map will be developed with images from both sensors: Landsat and Sentinel. This will help determine the area that can be mapped in higher resolution images. The 2016 map with Sentinel will be the point of reference for the MRV system.
- 5. Ongoing virtual exchanges between the REDD+ team and FAO to monitor the development of the maps and technical consultation on the Google Earth Engine tool to be used for this purpose.
- 6. The REDD+ team began to develop the national maps of native forest cover for the years 2000 2009 and 2016 and decided to start with the 2016 map with the Landsat sensor, then the 2016 map with the Sentinel sensor, followed by the 2000 map with Landsat and finally the 2009 map with Landsat. These maps are being developed using the Google Earth Engine with the assistance of the FAO expert in the development of the necessary scripts.
- 7. Third FAO expert mission to Uruguay for the week of December 4-8, 2017, with the objective of analyzing the progress made by the REDD+ team in the development of the coverage maps in the Google Earth Engine and defining the methodology for editing those maps once classification is complete.
- 8. The REDD+ team continued its work to develop the coverage maps. The progress made up to now is as follows:
  - a) 2016 Map with Landsat: completed in April 2018. The preciseness of this map will be evaluated by an external group of experts in July-August 2018.
  - b) 2016 Map with Sentinel: under development. It is expected to be complete by September 2018. The preciseness of this map will also be evaluated by an external group of experts once it is finalized.
  - c) Upon completion of the 2016 maps with both sensors, the 2000 and 2009 maps will be developed. Considering the time required for the 2016 map with Landsat as a point of reference, it is expected that the 2000 and 2009 maps will take approximately the same amount of time, such that the development of all maps will be complete during the first half of 2019.
- 9. In parallel, the FAO expert began to work on the development of the map of change for the 2000 2009 2016 period, using the multi-temporal methodology. The first version of this map was sent to the consultant at the end of May 2018. At this time, the REDD+ team is carrying out its first overall assessment of the map. It is expected that consultation with other experts will be required in order to perform a more thorough evaluation of this map and define any adjustments or modifications to be made. Likewise, the FAO consultant is preparing a methodological document describing the entire process followed in the development of the coverage maps and the change in coverage map for the reference period.

#### Emission factors

With respect to the necessary parameters for estimating GHG emissions and removals, it must first be noted that there are no allometric equations for any of the species found in the native forests of Uruguay, nor allometric equations applicable to the different types of forests. Therefore, it is not possible at this time to directly estimate the biomass existing in the native forests using these equations.

For this reason, in order to at least begin to estimate the carbon contents in the biomass for which data is available at the national level, we decided to work with the information provided by the National Forest Inventory (IFN) of Uruguay, prepared by the DGF of MGAP, estimating living biomass based on volume data and other national, regional or IPPC parameters, as available. The guidelines included in the 2006 IPCC Guidelines for National GHG Inventories were used as a reference.

For this, the data from the IFN began to be systematized along with the Assessment and Evaluation Division of the DGF, which is responsible for the implementation of the Uruguayan IFN. There are 1,467 lots of native forest surveyed in the IFN, with dasymetric information measured in each of them, including riverine forest (1,202 plots, 82% of the

total), highland (119 plots, 8% of the total), ravine (62 plots, 4% of the total) and park (80 plots, 6% of the total). There are 4 plots not considered in this evaluation, beyond the available data to be able to perform the different type of analysis required: 1 palm forest (single plot) and 3 coastal forests (mostly exotic species).

Before beginning the volume estimates, the database of native forest plots was updated based on the new information generated at the national level. This update consisted of reviewing all of the scientific names of the species included, with the help of national experts on species recognition and identification, updating and correcting possible errors in the nomenclature. Likewise, the classification of some lots identified as riverine forest, but which correspond to highland forest was corrected, based on a new layer of highland forest generated by researchers of the Faculty of Sciences at the University of the Republic. This updated database was defined as the official database of the DGF for native forest and will be the one used when working with the information on the native forest lots within the IFN.

With the IFN data, the volume of wood per plot and per hectare (m<sup>3</sup>) were calculated. For this, it was agreed upon with the DGF that the methodological basis would correspond to the IFN data analysis work on four pilot basins performed by an intern within the framework of the Project "Contribution in the development of a sustainable management strategy for native forest and its implementation in Uruguay" (DGF-BMEL).

As in most countries, the Uruguayan IFN documents the stock by the volume (m³) of the tree shafts. This excludes other aerial components such as the tree tops, branches, sprouts, foliage as well as the underground components (roots). Therefore, to estimate the biomass, the wood volume was converted into dry weight (ton m.s.) multiplying by a conversion factor known as the basic wood density (D). Then, the biomass expansion factor is applied (BEF), in order to expand the dry weight of the volume of the shaft to the other aerial tree components. Finally, the root to shoot ratio (R) was applied to include the belowground biomass in the estimate.

For the basic wood density, the data from the national bibliography were given priority whenever available, followed by available data from a regional database in second place, in third place the data available in a global database and finally, when no density data was available from the previous databases, an average of all of the abovementioned sources. The BEF and R data were the default values provided by the IPCC used in the National GHG Inventory of Uruguay (2014 INGEI of Uruguay included in the Second Biennial Update Report presented to the United Nations Framework Convention on Climate Change in December 2017).

The document describing the methodology followed in the preliminary estimate of carbon content in the living biomass of the native forests of Uruguay is in the process of being approved by the TC. Once this happens, it will be made publicly available.

While the information generated gives a general preliminary idea of the carbon content in the living biomass of the different types of forests surveyed in the Uruguayan IFN, it is necessary to broaden the knowledge on this topic at the national level to take one step further in the complexity of this estimate (at least Tier 2). At the same time, research also needs to be done on what happens with the carbon contained in other pools, such as the soil and dead organic matter, to be able to evaluate its relative weight in the total GHG emissions and removals associated with each REDD+ activity.

Based on the need to generate new knowledge arising as a result of practically all analyses being performed within the project's framework, a series of research lines were identified as necessary to develop in order to meet the requirements of this readiness phase.

The broad research lines identified are the development of the Forest Reference Level for the priority REDD+ activities; the design of the National Forest Monitoring System (NFMS) for measurement, reporting and verification of the actions to be implemented for each REDD+ activity; the study of the causes and dynamic of native forest invasion by invasive exotic species; the study of how the native forest and the different production systems in Uruguay are

interrelated; the study of the ecosystem services provided by the forests, with an emphasis on their buffer effect (water quality) and hydrological regulation; and aspects related to the ecology of the native forests, particularly with respect to natural succession processes and the regeneration of forest areas.

Once the broad research lines were defined and agreed upon by the Project's Political Committee and Technical Committee, they decided to begin to talk with INIA of the possibility of carrying out these research studies. Both Committees understood that INIA is the institution that must naturally be considered for carrying out this work, for several reasons: a) it is the leading agricultural research institution in Uruguay, recognized and respected by the public and private sectors; b) it has very close and well-oiled ties to the supply and demand of knowledge among the state - producers - researchers; c) the importance for the REDD+ Strategy and the country to consider the integrated native forests and interact with different production systems, and d) the relevance of interaction between the broad research lines defined and the need for them to be implemented not as separate components but constantly feeding into each other.

Based on this decision, several exchanges have been held to date with the INIA representatives, first to determine its interest in this proposal and, then, to hash out the technical and administrative details associated with the research lines to be carried out and the research teams that must be created to implement them.

At present, the Agreement is being drafted and the researchers to be included on the different teams are being defined. It is expected that during the next few weeks the expected outcomes of each of the components will be defined, as well as how the components interrelate and the profiles required for each research project. At the completion of this phase, the Agreement will be finalized and signed by the corresponding parties.

In particular, for the development of the Forest Reference Level and the design of the NFMS, the REDD+ team has already created the first draft of the Terms of Reference, which will be the basis for the exchange and methodological discussion with the lead researchers for this line of research. The following provides a short summary of the general guidelines governing this line of research:

The objective of this research project is to establish the baseline of GHG emissions/removals associated with the processes of deforestation, degradation and enhancement of forest carbon stock for the 2000 - 2016 period, which includes significant carbon pools based on their contribution to total emissions/removals and which will determine the performance of the REDD+ actions implemented in the future and which must be measurable, reportable and verifiable (MRV).

Understanding the carbon dynamic associated with these processes will help not only determine the role and importance of native forests as carbon drains in Uruguay and quantify the emissions and removals associated with them with greater certainty but will also help quantify the potential reduction of emissions and sequestration implied by the different REDD+ actions to be implemented. For this reason, this line of research clearly interrelates with the other lines included in the agreement with INIA and must constantly feed into each other during their implementation.

In particular, to estimate the forest reference levels, the general methodological frameworks to guide the work are those defined by the United Nations Framework Convention on Climate Change (UNFCCC) and the Forest Carbon Partnership Facility (FCPF).

Along with the REDD+ technical team, the methodological approaches will be defined for estimating the reference level of each of the following REDD+ activities: deforestation, degradation and enhancement of forest carbon stocks due to the expansion of forest area and the increase in carbon stock in existing forest areas.

Activity data will be generated as well as specific country emissions factors and parameters in order to estimate the GHG emissions and removals associated with each activity, considering in all cases information already existing at the national level, such as the IFN. The data to be generated must allow for the quantification of GHG emissions and removals for each of the carbon pools: living biomass (above and belowground biomass), soil organic carbon i and dead organic matter (dead wood and leaves), as long as those pools are significant to the total emissions and removals of each activity. With the data generated, the forest reference levels will be estimated for the 2000 - 2016 period and its respective uncertainty.

During the definition of the methodological approach for estimating the FREL of each activity, it must always be considered that this reference level must be comparable to the measurement (MRV) of the outcomes of the implementation of REDD+ actions in terms of GHG emissions and removals. That is, the design of the National Forest Monitoring System (NFMS) must always guarantee this consistency, as well as the viability of its integration with the general information system of the REDD+ project.

The design of the NFMS includes the following activities: the evaluation and redesign of the IFN and its adaptation to the REDD+ reporting requirements (MRV); the evaluation of the effects of the current management plans on the status of forest conservation and the proposal of guidelines and recommendations to adapt those management plans to forest governance within the framework of the REDD+ project; the design of a satellite monitoring system for REDD+, which not only monitors but also assists with the supervision and control of the native forest; the design of a permanent lots system, to collect more frequent data; the integration of the results of the lines of research associated with ecosystem services and production systems within the System. The MRV System to be designed must allow for the generation of the necessary data, in the format and at the frequency required for REDD+ project reporting and verifications.

It is expected that this research project will take on a relevant role in the transfer of capacities to the REDD+ project technical team and the technical teams of state institutions responsible for monitoring native forests at the national level and estimating GHG emissions and removals. Likewise, the information generated will also be a fundamental input for the dissemination and communication of the forest's importance as a carbon drain at the national level and its relevance to the mitigation of climate change at the global level. That is, it will have a significant impact on the public awareness and education actions to be performed by the REDD+ project.

# TECHNICAL FEASIBILITY OF THE METHODOLOGICAL APPROACH, AND CONSISTENCY WITH UNFCCC/IPCC GUIDANCE AND GUIDELINES

Is the REL/RL (presented as part of the R-Package) based on transparent, complete and accurate information, consistent with UNFCCC guidance and the most recent IPCC guidance and guidelines, and allowing for technical assessment of the data sets, approaches, methods, models (if applicable) and assumptions used in the construction of the FREL/FRL?

As mentioned above, the REDD+ project in Uruguay is in the middle of the readiness phase, therefore, progress is being made in the implementation of the different activities planned, with the final goal of developing the REL/RL for the deforestation, degradation and increase of carbon stock activities.

The information of reference that has been generated and will continue to be generated for the development of the forest reference levels to be included in the REDD+ readiness package for Uruguay is being adequately documented and will help report this process in a transparent, complete and precise manner.

Regarding the methodological orientations, as described in the previous point, the corresponding UNFCCC guidelines and the more recent guidelines of the IPCC have been followed and will continue to be followed throughout the reference level development process. At the same time, to date, we have achieved and will continue to ensure

consistency between the reference levels developed for REDD+ and the National Greenhouse Gas Inventory of Uruguay (INGEI), as established by Decision 13/CP.19 of the COP of the UNFCCC.

All of this will allow, as applicable, for an external technical assessment of both the data series used and the approaches, methods, models and suppositions applied in the development of the FREL/FRL.

# OTHER ACTIVITIES PERFORMED FOR THE DEVELOPMENT OF THE FREL/FRL

#### PROGRESS MADE IN THE DEFINITION OF THE FOREST CONCEPT FOR REDD+ URUGUAY

As mentioned above, in the development of the land use and land use change maps, it was necessary to work with national mapping experts to agree upon an operative definition of forest associated with the minimum mappable unit by the sensor used in each of the maps. While this aspect determines what will operatively be considered as forest in the maps prepared, from the perspective of natural resources management, it is necessary to make further progress on the new concept of forest that will serve as the basis for the REDD+ Strategy in Uruguay.

In very general terms, the approach to be proposed by REDD+ Uruguay for the governance of its forests will be a landscape approach, which considers the forests integrated with people and other productive and social activities that interact on the land, in both rural and urban areas, and with a very special focus on the ecosystem services provided by those forests. This will help manage forests under a new concept and considering new analysis scales, that go beyond the property concept, to incorporate the strictly forest, but also the ecological, social, cultural, spiritual, productive, economic and environmental spheres. This new concept will also enable the integration of the forest in way that makes the potential increase in forest surface area more viable.

Furthermore, this implies that the research and generation of knowledge for REDD+ must have that same interdisciplinary approach, in order to provide responses to the research questions by looking at a single problem from different disciplines and proposing lines of action and practical solutions while integrating all of these concepts. This is how research is conceived within the framework of REDD+ in Uruguay and that is the focus that will prevail in the Agreement with INIA.

# 2.4 - MONITORING SYSTEMS FOR FORESTS, AND SAFEGUARDS

# 2.4.A. NATIONAL FOREST MONITORING SYSTEM

# DOCUMENTATION OF MONITORING APPROACH

Is there clear rationale or analytic evidence supporting the selection of the used or proposed methodology (combination of remote sensing and ground-based forest carbon inventory approaches, systems resolution, coverage, accuracy, inclusions of carbon pools and gases) and improvement over time?

Has the system been technically reviewed and nationally approved, and is it consistent with national and international existing and emerging guidance?

Are potential sources of uncertainties identified to the extent possible?

As stated in the previous point, it is important to mention once again that the REDD+ project is in the middle of the readiness phase in Uruguay (implementation began in January 2017). While progress has been made in all project components, there are still some important aspects to develop in each of these prior to completing the REDD+ readiness package for Uruguay.

With respect to the National Forest Monitoring System (NFMS) a series of activities have been carried out, as detailed below, in order to determine the information available and the information gaps, the existing institutional arrangements and the available platforms and tools for forest monitoring. This analysis will help select the most appropriate methodology for the specific situation and the particularities of the Uruguayan native forests. It is expected that this methodology will combine the use of different remote sensing tools with the survey of field information, in order to generate the necessary information for forest monitoring, forest control and supervision, the monitoring of REDD+ actions during the implementation phase and the reporting and verification of the results obtained.

The design of this system must include an analysis of the necessary institutional arrangements to carry it out, in order to guarantee its viability and sustainability over time. This implies considering the existing and necessary technical capacities in the different institutions that participate in the system, as well as guaranteeing the inter-operability with other existing information systems and institutional commitment to the monitoring of the country's native forests.

The following details the activities that have been performed up to now as part of the design of the Uruguayan forest monitoring system, since the beginning of the implementation of the REDD+ Project in Uruguay:

# Development of Uruguayan native forest cover maps and change in forest cover maps

It must first be noted that the mapping activities being carried out (as detailed in the item on Forest Reference Level as a basis for the generation of activity data) will serve as fundamental input to be considered in the design of the forest monitoring system. Both the tools applied and the methodological definitions made must be taken into account for the construction of this system.

### Survey and analysis of information and existing information platforms

As in the case of the Forest Reference Level, the first activity performed for the design of the NFMS was an analysis of the information available at the national level, the existing information platforms or systems and the available GIS or remote sensing tools, in order to begin to assess the viability of including or using them in the REDD+ project.

For this, some of the interviews described in the previous point of this report were primarily aimed at analyzing potential information sources available for the development of the forest reference level, but they also helped begin to see possible information platforms or systems already existing at the national level which could host the information generated by the REDD+ project.

# Creation of a provisional GIS to host the existing information and new information generated by REDD+

In order to host so much geographic information of interest for the project existing in the country, as well as the new information generated within the framework of the REDD+ project, a provisional GIS was developed in a local database.

Therefore, this database has different layers of geographic information, such as data on the sampling points of the IFN, the historical series of national forest cartography, the land cover maps of DINOT and the sampling points of the land use and change in land use survey performed with Collect Earth. It also includes other geographic information on the country, such as property lines, administrative divisions, cities, among others.

For the time being, this provisional information system for the REDD+ project allows all members of the technical team to access this information and perform different multi-criteria analyses of use to the different components. At the same time, this information will be the basis upon which the project's MRV system will be construction, which is expected to ultimately be hosted in one of the country's existing platforms. This aspect will be defined as this component is developed further.

The information generated by the REDD+ project in 2017-2018 and currently included in the provisional information system includes:

# 1. Map of the presence of invasive exotic species (IES)

The invasion of the native forests in Uruguay by different invasive exotic species is one of the greatest concerns for those responsible for managing and conserving this natural resource and, in their opinion, one of the main causes of the current status of degradation. It is also a great concern for representatives of civil society, who have repeatedly expressed that the invasion processes are intensifying and there are no clear solutions to address this problem.

For this reason, this topic has great relevance to REDD+ Uruguay and will be addressed through research, to understand the causes and dynamic of the invasion of exotic species, and through the systematization of existing information in order to perform a preliminary analysis of these invasion processes.

In particular, this work to map the presence of IES is based on the systematization of the information collected in the first Uruguayan IFN.

The IFN was implemented in 3 different phases: the first phase during 2009-2010, the second in 2011 and the third from 2014-2016, each corresponding to the availability of funding to carry it forward. The variables surveyed in each phase were not always the same, therefore the analyses of the IFN information must always take into account these considerations.

The presence/absence of invasive exotic species is one of the IFN variables surveyed in a different way depending on the corresponding IFN phase. During the first two phases of the IFN, the woody IES found in native forest lots were measured to gather dasymetric information on those species. The third phase of the IFN only determined the presence or absence of IES surrounding the lots.

This only helps analyze the presence or absence of IES, assuming that the lots surveyed in the third phase of the IFN which show presence of IES invasion in the surrounding areas also present IES within the lot. In some cases, there is a qualitative determination of the degree of invasion severity, but this information was left out of the analyses performed.

Based on the results of the systematization of this information, different maps were developed. In the first place, the IFN lots with the presence of IES were mapped, which helped determine the percentage of the total IFN lots (from the 3 phrases) with IES and their location within the territory.

A concentration map was also developed for the lots with the presence of IES (heat maps) at the national level, to give a preliminary idea of those territory zones where invasion appears to be more significant. While this map seems to coincide with the general perception in the country about invasion and geographic location, it is important to consider that the concentration of IFN lots with the presence of exotic species is highly associated with the sampling design of the Inventory itself and is not always related linearly to the presence of exotic species. For this reason, the next step will be to develop separate heat maps for each phase of the IFN and analyze them separately. This will help determine, with a bit more certainty, how much of the invasion concentration is explained by the sampling design and how much by invasion itself.

The REDD+ technical team is preparing a document containing the methodology used in the development of these maps, the maps themselves and the analysis of the results obtained.

At the same time, as detailed in this report in the point on Forest Reference Level, within the framework of the Research Agreement to be signed with INIA, one of the broad lines of research to be implemented is related to this topic. The objectives of that research are: a) to broaden the understanding of the territorial extension of the IES and to

understand which factors influence the entry and dispersion of the main invasive exotic species in Uruguay; b) to study prevention alternatives to establish and control the dispersion of IES.

For this purpose, the information available in the country on woody IES for the different types of forests in Uruguay will be systematized to determine and analyze the patterns and mechanisms of invasion and dispersion. The IFN data from the native forest registry will be used as a basis, along with other information sources. It will also analyze the different IES control techniques tested and used in the country and determine the most suitable alternatives for the different scenarios (production systems) and types of forests.

The information generated within this line of research will be an important input for the development of the Forest Reference Level for degradation and also for this activity's MRV. Likewise, the analysis of invasion and its different control alternatives must consider the production systems associated with the forest (i.e. livestock).

# 2. Illegal activity maps (illegal logging, transportation and sale)

In Uruguay, the cutting down of native forest is permitted in some specific situations established in the Forest Law No. 15,939 of the year 1997. These situations refer to the use of wood for consumption within the rural establishment and the possibility of requesting a permit from the competent authority to extract wood within a forest establishment registered before the DGF.

The transportation of wood from native forests and its sale in stands is also permitted, as long as it has the corresponding transportation permits issued by the DGF. These permits must be presented by both the carrier and the stand manager in the event of inspection or road-side control. All situations in which the respective documentation does not comply with regulations shall be considered irregular or illegal.

Inspections performed during transit or on site primarily respond to claims received by the DGF or requests for inspection submitted by the owner of the establishment as part of the native forest registration procedure. Roadside inspections are generally performed by the police. The final resolution regarding penalization of illegal activity is the responsibility of the DGF.

Within the DGF, there is an archive containing part of the historical information on illegal activity (approximately 50% of the total) for the period from 2010-2016. The information contained in that archive is only available in hardcopy, therefore, it had to be digitalized and systematized.

The objectives of systematizing the information contained in the archive of illegal activity were: a) to analyze the occurrence of different types of illegal activities (establishment, transportation or stands) by year, and b) to analyze the evolution of different types of illegal activities over time (trend).

As a result of this work, statistics were produced on total illegal activity for the 2010-2016 period and on the different types of illegal activities by year for the same period. Likewise, maps were developed for each year, with the different types of illegal activities and a general map for the 2010-2016 period showing illegal activity by type in the territory.

This information will help draw preliminary conclusions on the control and supervision mechanisms, illegal activity trends over time, the zones or regions with greater or lesser illegal activity and its causes, among others.

Additionally, the REDD+ team is surveying the remaining 50% of the information related to illegal activity found in the DGF, to complement the statistics associated with these events, by year and by infraction type. This information will not help complement the maps of illegal activity (except in the case of infractions in establishments where the property ownership number is known), as we still do not have the necessary data for the corresponding georeferencing.

The REDD+ technical team is preparing a document containing the methodology used in the development of these maps, the maps themselves and the analysis of the results obtained.

### 3. Maps of logging permits issued each year

Another aspect to be quantified in the country is the native forest wood that is authorized for extraction each year by the competent authority, the types of governance and its spatial location. Likewise, it would also be interesting to perform a temporal analysis of logging permits granted, in order to associate forestry governance to results related to production, and the condition, health or status of forests in the country. The spatial location of logging permits that have been historically issued will help analyze the results of current resource management at different scales, at the property, sub-basin, basin, or landscape level. This analysis will contribute important information for defining the concept of forest for REDD+ and the concept of resource management with this new approach to be implemented within the framework of the REDD+ actions.

Within the DGF, there is a native forest registry that contains the historical information on the registered forests and authorized logging permits, but this information is only available in hardcopy files and, therefore, this information must be digitalized.

Due to the scope of work, this aspect will be addressed as part of a consulting service to be hired and executed during the second half of 2018 (at the time this report was written, it was in the proposal selection phase). This consulting will include the digitalization of the information contained in the DGF Native Forest Registry files as described later in this chapter.

### <u>Visit by the World Bank MRV Expert, Julián Gonzalo, to define the roadmap for the Uruguayan MRV</u>

Among the activities planned in this component for 2018, was the visit to Uruguay by World Bank MRV expert, Julián Gonzalo. This visit took place from January 15-19, 2018, and its objectives were to define a roadmap for the design of the MRV system of the REDD+ project in Uruguay and to identify the existing institutional mechanisms in which the MRV could be inserted and the necessary adjustments to do so. Gonzalo also took advantage of this visit to discuss aspects related to the generation of activity data for the REL/RL.

During the expert's stay in Uruguay, the following activities were carried out:

- a) Several presentations by the REDD+ technical team on the context and reality of the forest ecosystems in Uruguay; the institutional arrangements tied to the monitoring of those ecosystems; the existing information (cartography, forest inventory, forest registry, governance plans, etc.), among others.
- b) Several presentations by the World Bank expert on experiences of other countries in the design of their respective MRV systems, their components, characteristics and technical specifications.
- c) Onsite walkthrough for the expert to familiarize himself with the characteristics of the different types of forests existing in Uruguay and monitoring challenges.
- d) Discussion of aspects related to the design of the MRV for REDD+ Uruguay and the steps to be taken in the upcoming months.

Based on the joint analysis of the reality of the forests in Uruguay, the existing information at the national level, the nature and scope of these change processes, the reporting requirements at the national level, the MRV system requirements, the necessary institutional arrangements and the capacities of the REDD+ Uruguay technical team, participants defined the next steps to take to continue to develop this project component. The following summarizes the main aspects defined:

1) Regarding the strengthening of the REDD+ technical team capacities for MRV:

- a) A remote sensing specialist must be hired to assist the REDD+ team, to collaborate in the development of the necessary maps, in the analysis of applicable remote sensing tools, in an analysis associated with satellite images and spectral responses by forest type or by species, and in the design of the MRV system.
  - This selection process was performed between February and April 2018, and the expert to take on this role has already been selected. The administrative formalities related to the hiring process are currently underway and it is expected that the expert will be working with the team by the end of October 2018.
- b) An ecology specialist must be hired to assist the REDD+ team, in the characterization of the different types of native forest in Uruguay, in the identification of useful aspects of different forest types to facilitate their monitoring by remote sensing, in the analysis of forest successions, in the analysis of the interaction between the forests and the production systems and the identification of the ecosystem services provided by the forests.

This selection process was performed between March and May 2018 and the expert to take on this role has already been selected. The administrative formalities related to the hiring process are currently underway and it is expected that the expert will be working with the team by the end of October 2018.

2) Regarding the components initially expected to be included in the NFMS:

Considering that there are still some relevant aspects to define in terms of the REDD+ National Strategy and the actions to be measured, reported and verified through the MRV system, it is still too early to talk about the components of this system.

However, the REDD+ team, along with the WB expert, decided that it was possible to preliminarily identify the already existing information systems that will feed into the REDD+ or MRV REDD+ information system. At the same time, they analyzed the adjustments to be made to these systems to favor forest governance with the new REDD+ approach and to meet the REDD+ reporting and verification requirements, among the country's other reporting and verification needs.

The existing information systems identified as relevant to the REDD+ MRV were:

- 1) Forest cartography: its frequency must be redefined to coincide with the country's reporting requirements, for example, BUR, INGEI, NDC, etc. The methodology currently used to develop the coverage maps must be modified by the REDD+ team.
- 2) National Forest Inventory: a statistical analysis of the results of the first IFN is suggested in order to adjust the sampling design and methodology (stratification, sampling size, etc.). Its frequency and the variables surveyed in each lot must be redefined.
- 3) Collect Earth The survey performed in 2017 with this tool should be used to determine the land use and changes in land use in Uruguay for validation of the maps being developed within the framework of REDD+. To integrate the MRV system, we first suggest ensuring the coincidence of the Collect Earth grid with the IFN lots. To use Collect Earth as a monitoring tool, high-resolution images must be available for the required years. This will imply negotiation with the different high-resolution image providers.
- 4) Native forest registry and related governance plans -this information should be included as part of the MRV system. Both the registry and the logging permits must be adapted to the new forest governance approach and the new concept of forest proposed in the REDD+ National Strategy. As mentioned, the process being carried out to digitalize the information contained in the registry and logging permit files will be detailed below.

At the same time, other components were identified that still do not exist at the national level, but which will be fundamental to generating complementary information for the monitoring, planning and governance of forests within the REDD+ framework. These components are:

- Permanent plots system: measured more frequently than the IFN lots, ideally every 2 years, measuring half the lots in one year and the other half in the other. The classification by forest type is fundamental to the proposal of these plots. This should be coordinated with other actors (academia, civil society, etc.) who are also interested in collecting periodic information on the forests, so as to cover the different objectives of generation of knowledge and information.
- Map of the ecosystem services provided by the forests, to cross check the information on carbon content, priority ecosystem services, associated production systems and costs of opportunity, in order to prioritize lines of action and facilitate decision-making for the management of resources within the framework of the REDD+ National Strategy.

During the expert's visit, they also reviewed the technical aspects tied to the development of coverage maps and change in coverage, and the WB expert provided recommendations for this. The main suggestions had to do with the methodology applied for the change in coverage map and the methodology for assessing the preciseness of the coverage maps.

For the coverage maps, the expert suggests testing the use of a stack of images for each year and not a single image to try to improve automatic classification and reduce the number of segments edited during the editing process. This will help maximize process automation, improve the comparability of the maps developed with this methodology and reduce the amount of time required to edit the maps. The current technical team of the REDD+ project does not have the necessary knowledge to perform these tests, so it is expected that they will be able to perform these tests once the remote sensing expert has joined the team.

To assess the accuracy of the coverage maps, the expert suggests following the methodology proposed by Oloffson et al. (2014). For areas of little relevance (small areas), he recommends ensuring a minimum sample size for the assessment. In the case of the coverage map for the year 2000, for which high-resolution images and field points are not expected to be available for the assessment of this year, assessment shall be done using the interpretation of the same image used to develop the map. These recommendations will be taken into account in the assessment of the accuracy of the maps during the next few months, in accordance with what is detailed in point 3 of this report.

For the change in coverage map, the expert suggests developing a probability of change map and not a map of change. This implies determining a minimum distance and a maximum distance between the statistical variables associated with the pixels of one image and another (multivariant distances) and interpreting that any given distance represents deforestation or degradation or increase in surface area.

To follow this last recommendation, several virtual exchanges were held with the participation of the WB experts, the FAO expert and the REDD+ technical team, to clearly understand the methodology currently being applied by the FAO expert in the development of this map and the viability of introducing the changes suggested by Julián Gonzalo.

While these exchanges were very productive and facilitated a clearer understanding of some of the methodological issues, the FAO expert was unable to incorporate the adjustments proposed by the WB expert in the multitemporal change map. Likewise, the REDD+ team members do not currently have enough knowledge to be able to apply these modifications to the methodology used by the FAO expert in the development of this map. This topic is expected to be addressed by experts within the framework of the Research Agreement to be signed with INIA. For this, the INIA team of researchers must have experts with this profile.

Julián Gonzalo has provided ongoing advisory since his visit to Uruguay, through virtual meetings, and continues to be fundamental to the Uruguay REDD+ team. The Uruguay team hopes that this will continue to be the case. The WB expert's next visit to Uruguay is scheduled for November 2018 and will be aimed at assessing the progress made in the MRV activities. This date has been established for the visit considering that the remote sensing and ecology experts will already have joined the REDD+ team.

#### <u>Digitalization of the Native Forest Registry and logging permit files</u>

As mentioned several times throughout this report, a large part of the information on native forest governance existing in Uruguay is currently only available in hardcopy files. For example, the native registry files and governance plans or logging permits (logging authorizations).

The native forest registry is currently voluntary and is controlled by the DGF. Logging permits may only be requested in forests that are registered, and tax exonerations associated with the native forests are only received if the forests are registered. Therefore, the information contained in these files is important from both an administrative and technical perspective.

For this reason, the REDD+ activities consider the hiring of a specialized company to digitalize the information contained in the manual files of the native forest registry and logging permits.

This required some prior work by the REDD+ team to prepare the hiring process, as described below:

1) Preparatory work to determine the scope of the digitalization work and to define hiring and work budget figures.

This work implied reviewing and collecting information from all of the registry files contained in the archive of the Forest Governance Division of the DGF. Specific spreadsheets were prepared for this survey, including the following fields: Department, Registration No., Property Ownership No., Registered Surface Area, Year of Registration and Last Update (NF Governance Plan). Approximately 4,000 Registry files were reviewed.

This information and the number of registrations with a governance plan or associated logging permit was used to estimate the number of files to be digitalized. The objective of this work, in addition to determining the scope of the work for budget purposes, was to guarantee that all governance plans associated with a registration and all registrations without an associated governance plan but with activity after the year 2000 (first year in the period of reference) were included in the digitalization.

2) Definition of the fields with information to be collected in the digitalization.

Based on the objectives established by REDD+ and agreed upon with the Forest Governance Division of DGF, the fields (data) of the registration files and governance plans were defined for inclusion in the digitalization. This corresponds to the information in the registration files and governance plan files that will be available in digital format for subsequent processing and integration to the Native Forest Information System and REDD+.

From a methodological perspective, a database shall be developed in connection with a GIS, where two layers of spatial information will be generated by registry file: a layer associated with the registration information and another layer associated with the governance plans (logging permits) of native forest.

The layer associated with the registry files will contain information taken from the file and the updated information obtained from available satellite images. The information contained in the file shall include: Registration No., Governance Plan No., Property Ownership No., Registered surface area, Date of registered surface area, Surface subject to tax exoneration, Year of surface area exoneration, and Date of the image used for the

registration. On the other hand, the data obtained from the available satellite image will complete the following fields: date of the last satellite image available and Forest surface area base on GIS.

The layer associated with the governance plan files will include the geo-referencing of logging authorization blueprints and will contain the following information: Governance Plan No.; Registration No.; Property Ownership No.; Type of Governance Authorized (clear felling, thinning, trimming, street opening, etc.); Years of the governance resolution and governance status.

The database tied to GIS will have information contained in the two GIS layers mentioned above and another layer taken from the governance plan files not associated with a specific polygon but with the entire approved governance plan. The non-spatial data contained in the files are: authorized logging surface area, authorized extraction tons, number of bills per year and extracted tons.

Figure 3 shows the draft of the Entity Relationship Model that will be used to develop the database for the digitalization of the Registry and Governance Plan files. In yellow are the two GIS layers corresponding to the Forest Registry and Governance Plans (which is in the review and modification phase).

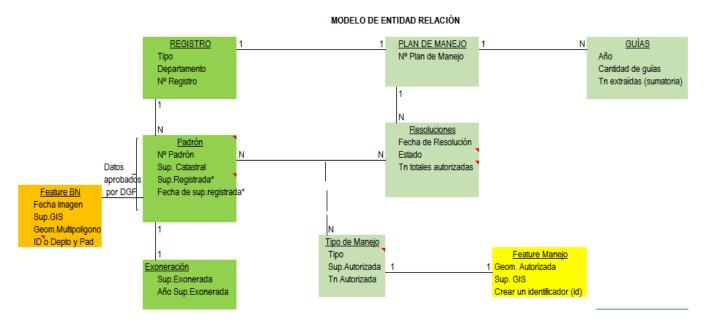


Figure 3. Draft design of the Entity Relationship Model for digitalization of the Registry database.

In association with the Entity Relationship Model needed for the development of the registry Database, a form was created to use in the entry of the information from the files to the database. Both the Entity Relationship Model and the form were developed in collaboration between the REDD+ team and the DGF technical staff and SNIA (National Agricultural Information System - MGAP). The following images (Figure 4, Figure 5 and Figure 6) present a draft of the

## Registro

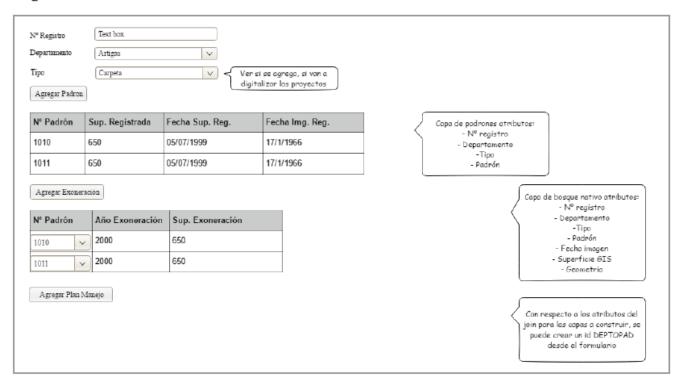


Figure 4. Entity Relationship Model for Registry database

form which is currently in the process of review and modification.

# PlanManejo

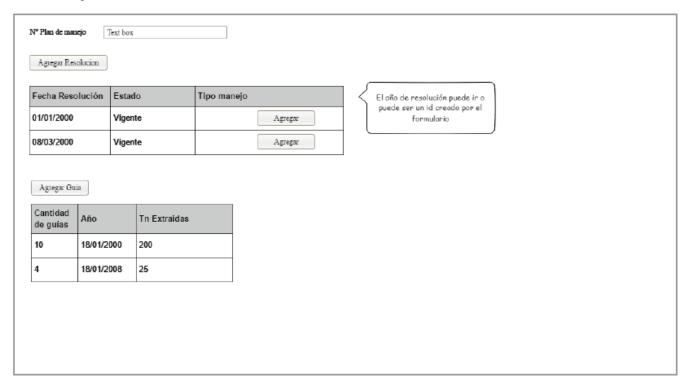


Figure 5. Entity Relationship Model for Management Plans.

# TipoManejo

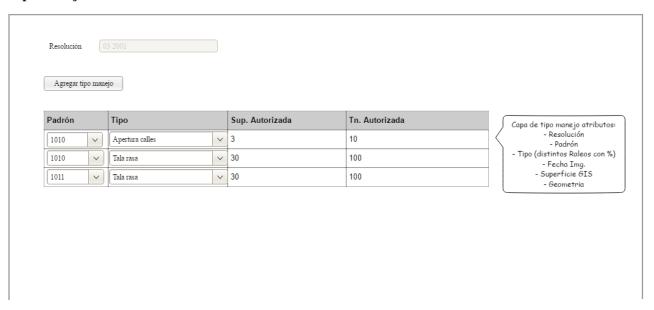


Figure 6. Entity Relationship Model for Management Type.

#### 3) Bid to hire a company for this task.

Based on the work described in the previous points, a bid was developed for the hiring of a company to carry out the digitalization of the information in the files. A National Public Bid was published (LPN01/2018), and a meeting was held with the interested companies, who received a document detailing the information to be digitalized. Two company consortia presented bid offers, and at the time of this report, the bid is still in the selection phase.

#### Design of the NFMS system within the Agreement to be signed with INIA

As detailed in the point of this report on the FREL/FRL, one of the lines of research to be included in the Research Agreement with INIA is the development of the Forest Reference Level and the design of the corresponding SNMF for each priority REDD+ activity.

In sum, the design of the forest monitoring system must allow for the generation of the necessary data, in the format and frequency as required for the REDD+ project reports and verifications, as well as the consistency and comparability with the Forest Reference Level developed.

#### GIS training for members of the REDD+ technical team and the DGF

Finally, another activity being carried out within the framework of the REDD+ project consists of the training of the human resources associated with forest monitoring in the Geographic Information Systems. For the REDD+ project, it is essential to strengthen the capacities of the staff members that are or will be responsible for native forest monitoring to ensure its sustainability over time, therefore these training sessions are focused on broadening their knowledge of the useful and applicable tools for this work.

At the moment, the first basic GIS training activity was held between April and June 2018, with the participation of the members of the REDD+ technical team and representatives of all Divisions of the DGF. A second training activity is scheduled from July to November 2018.

#### DEMONSTRATION OF EARLY SYSTEM IMPLEMENTATION

What evidence is there that the system has the capacity to monitor the specific REDD+ activities prioritized in the country's REDD+ strategy?

How does the system identify and assess displacement of emissions (leakage), and what are the early results (if any)?

How are key stakeholders involved (participating/consulted) in the development and/or early implementation of the system, including data collection and any potential verification of its results?

What evidence is there that the system allows for comparison of changes in forest area and carbon content (and associated GHG emissions) relative to the baseline estimates used for the REL/RL?

As explained above, the Uruguay REDD+ project is currently in the middle of the readiness phase and, therefore, in the middle of the design process for the forest monitoring system. Consequently, the early implementation of this system cannot be demonstrated.

While there are still many activities pending within this component, the importance of a system designed to allow for the monitoring of specific actions given priority in the REDD+ National Strategy has always been considered and made explicit. This is clearly seen throughout this report in both the description of the activities performed within the framework of this component and in the development of the REL/RL.

Beyond the fact that the R-PP has already explicitly stated that the risk of emissions leakage due to the implementation of REDD+ actions is preliminarily considered to be low, the monitoring system to be designed is expected to allow for the monitoring of potential emissions leakage that may occur.

With respect to the stakeholders' participation in the development of this system, the previous point detailed the meetings and interviews held on this topic with key actors in the monitoring of natural resources at the national level. This ensures that the stakeholders and those that will take on a key role in the implementation of this system are involved in its development from the beginning. As mentioned, the system's design will include an analysis of the necessary institutional arrangements to carry this out, so as to guarantee its viability and sustainability over time. This implies considering the existing and necessary technical capacities in the different institutions that participate in the system and guaranteeing the inter-operability with other existing information systems and the institutional commitment to the monitoring of the native forests in the country.

While there is no evidence that the monitoring system allows for the comparison of changes to the extensions and carbon content of the forests (and the related GHG emissions and removals) with the baseline estimates used for the FREL/FRL because it is still in the process of being designed, the technical team of the REDD+ project has ensured and will continue to ensure that this will be the case.

#### INSTITUTIONAL ARRANGEMENTS AND CAPACITIES

Are mandates to perform tasks related to forest monitoring clearly defined (e.g., satellite data processing, forest inventory, information sharing)?

What evidence is there that a transparent means of publicly sharing forest and emissions data are presented and are in at least an early operational stage?

Have associated resource needs been identified and estimated (e.g., required capacities, training, hardware/software, and budget)?

As mentioned repeatedly throughout this report, the REDD+ project in Uruguay is in the middle of the readiness phase and, therefore, the forest monitoring system is under development.

In this process, a preliminary survey has been performed of the institutional actors that are currently involved, in one way or another, in the monitoring of natural resources in Uruguay, the existing information platforms and the tools used in each case. Based on this and as part of the SNMF design process, an analysis will be done on the necessary institutional arrangements to implement it, so as to guarantee its viability and sustainability over time. This implies considering the existing and necessary technical capacities in the different institutions that participate in the system and guaranteeing the inter-operability with other existing information systems and the institutional commitment to the monitoring of the native forests in the country. For this, the needs in terms of resources, capacity strengthening, training, equipment, IT programs, specification, etc., and their associated budget shall be identified and estimated.

Furthermore, access to public information in Uruguay is a right of all citizens, and all government entities are permanently working to guarantee this right. The same applies to the REDD+ project which, in the design of the SNMF must guarantee free access to all information for all citizens, ensuring a transparent method for publicly sharing all data generated, in terms of both GHG emissions and removals and forest governance.

2.4B. INFORMATION SYSTEM FOR MULTIPLE BENEFITS, OTHER IMPACTS, GOVERNANCE, AND SAFEGUARDS

The environmental safeguards implemented (Operational policies OP 4.01, 4.04, 4.09, 4.11 and 4.36) have been taken into account across the entire framework of activities developed by the REDD+ Technical Team, according to the verification done during the Mission (through work meetings with technical staff and the review of selected produced by them). The verification activities addressed: a) Terms of reference, invitations to express interest, consulting contracts with individuals and entities (adequately considered); b) Project information/awareness in workshops and work meetings within the co-implementer institutions and civil society groups, and c) Technical documents prepared or under development.

# IDENTIFICATION OF RELEVANT NON-CARBON ASPECTS, AND SOCIAL AND ENVIRONMENTAL ISSUES

How have relevant non-carbon aspects, and social and environmental safeguard issues of REDD+ preparations been identified? Are there any capacity building recommendations associated with these?

Regarding the multiple benefits, actions are being carried out to identify the benefits of special priority for the population. During the workshops held up to now and to be held later this year (see section 2.1 above), information was collected on the different uses of native forest by the workshop participants. Upon completion of this phase and identification of the multiple key benefits from a property, subnational and national perspective, information on these benefits will continue to be collected and generated.

To collect existing information, it is important to consider the insertion of the REDD+ project within the ministries. For example, the daily coordination of the project with the Biodiversity Division of the DINAMA or with the National Protected Areas System (SNAP) will provide key and up-to-date information on the multiple benefits mentioned in several workshops on forest biodiversity. Similar advantages can be found with other divisions in both ministries. On the other hand, to generate new information, it is important to consider the agreement being negotiated with INIA (see 2.3 above) and other options to generate information being explored by the project in coordination with the World Bank –agreement with the National Innovation and Research Agency, agreements with Research Institutes within the University of the Republic, etc.

As described in the section on ENREDD+, a participatory identification of the priorities in terms of the multiple forest benefits along with an adequate information base are key to implementing the ENREDD+ as planned. Not only is it necessary to focus the finite resources available within the framework of a REDD+ program so as to maximize conservation and the increase of carbon stock, it is also important to seek out additional incentives, such as these multiple benefits, to gain partners on both the side of carbon supply and the side of carbon demand associated with native forests.

#### MONITORING, REPORTING AND INFORMATION SHARING

What evidence is there that a transparent system for periodically sharing consistent information on non-carbon aspects and safeguards has been presented and is in at least an early operational stage?

How is the following information being made available: key quantitative and qualitative variables about impacts on rural livelihoods, conservation of biodiversity, ecosystem services provision, key governance factors directly pertinent to REDD+ preparations, and the implementation of safeguards, paying attention to the specific provisions included in the ESMF?

There is still no evidence because the country is currently in the middle of the readiness phase and implementation of the FCPF-related assistance.

#### INSTITUTIONAL ARRANGEMENTS AND CAPACITIES

Are mandates to perform tasks related to non-carbon aspects and safeguards clearly defined?

Have associated resource needs been identified and estimated (e.g., required capacities, training, hardware/software, and budget)?

As mentioned before, the REDD+ project is in the middle of its readiness phase, therefore, as in the other elements mentioned above, there is still no final arrangement to monitor non-carbon aspects.

In terms of training, the REDD+ technical team has participated in a number of regional activities on SESA, SIS and REDD+ Safeguards, including South-South exchange activities on SIS and Safeguards with other countries in the region, through a specific agreement with CONAF, and participation in exchange within the framework of the project implemented by Mexico and Chile with the support of UN-REDD+.

To finalize the SIS and REDD+ Grievance Redress and Resolution Mechanism specific consulting is expected to be contracted for which the Technical Committee will define the necessary terms of reference during the third quarter of 2018 so as to begin work by early 2019.

For the development of the EESMF, the SIS and the Grievance Redress and Resolution Mechanism, legal advisory will be required. The legal advisors have already been selected and are undergoing the administrative formalities associated with the respective contract. Work is expected to begin in October 2018. Also expected for October 2018 is a training workshop on the legal aspects of REDD+, with the participation of the legal advisors of both ministries, as well as key staff of the REDD+ project. These actions will help carry out a more detailed analysis of the existing legal aspects at the national level and those needed to generate policies and procedures in order to address and comply with the Social and Environmental Safeguards.

# 3. ANALYSIS OF THE PROGRESS MADE IN ACTIVITIES FINANCED BY FCPF READINESS DONATIONS

The Country outlines progress made as well as identifies any delays in the implementation

of the activities financed by the Grant and proposed actions to address the causes of the delays.

# 4. REVIEW OF URUGUAY'S COMPLIANCE WITH THE COMMON APPROACH

From the beginning of the R-PP formulation process, the country has taken actions to consider and comply with the requirements of the common approach to social and environmental safeguards, including the SESA and ESMF. This included early dialogue meetings held in 2014 and 2015 with relevant representatives of organizations tied to rural production companies, environmentalist NGOs and representatives of indigenous groups. During 2017 and 2018, the participation and consultation workshops mentioned previously in this report were also carried out.

All of these prior participation opportunities, before the formal initiation of the SESA process, have been useful for collecting the perceptions of different stakeholders regarding the potential benefits, environmental and social risks

associated with the native forest. It has also helped to begin to identify the technical, regulatory and institutional aspects to be addressed through the system of safeguards defined at the national level and the ESMF required for the development of policies, actions and measures defined in the REDD+ Strategy.

During 2017, the REDD+ technical team has reviewed international experiences related to environmental and social safeguards and their application. Members of the REDD+ technical team in Uruguay have also participated in regional exchanges on the implementation of environmental and social safeguards<sup>4</sup>. Likewise, a meeting was held with the CONAF Chile team to address the following topics, among others: the plans for the implementation of the Social and Environmental Safeguards and the ENCCRV approach for the construction of the Safeguards Information System for the case of Chile.

The analysis of international experiences, as well as the action planning exchange foreseen in the REDD+ readiness phase in Uruguay, has been useful to design the participation and consultation activities developed up to now. It is also considered highly useful for the planning of the SESA consultation phase (to begin in the last quarter of 2018) as well as for the subsequent design of the safeguards information system to accompany the implementation phase of the REDD+ Strategy in Uruguay.

<sup>4</sup> Second exchange workshop on the implementation social and environmental safeguards Chile – Mexico, March 20-24, 2017, Temuco, Chile.

# 5. FINANCING PLAN FOR THE READINESS ACTIVITIES.

Category	Budget		Balance not			
		Executed	Committed (*)	Total Assigned	%	Assigned yet
Component 1	1.110.438	140.576	152.927	293.503	26%	816.935
Component 2	1.941.153	162.497	328.083	490.580	25%	1.450.573
Component 3	276.955	200.178	186.984	387.162	140%	(110.207)
Component 4	447.454	157.943	174.421	332.363	74%	115.091
Component 6	24.000	55.877	80.645	136.522	569%	(112.522)
Total USD	3.800.000	717.071	923.060	1.640.131	43%	2.159.869

Uses of Funds (in US\$ thousands)								
	Total	Funds	Funds used <sup>7</sup>		Funds available	Financin g gap	Request to FCPF <sup>10</sup>	
R-PP Component	needed (A) <sup>5</sup>	pledged (B) <sup>6</sup>	Funds Commit -ted (C)	Funds Disbur- sed (*)	(= B - C) <sup>8</sup>	$(=A-B)^9$	(if any)	
Component 1	1,110	1,110	153	141				
Component 2	1,941	1,941	328	162				
Component 3	278	278	187	200				
Component 4	447	447	174	158				

<sup>&</sup>lt;sup>5</sup> Total needed is the amount of resources necessary to complete a given component. All numbers in this table should be the latest numbers, which may not necessarily match the numbers in the original R-PP that was presented to the PC.

<sup>&</sup>lt;sup>6</sup> Funds pledged encompass the amount of funds promised by different donors and / or the national government to fund a specific component and available to the country.

<sup>&</sup>lt;sup>7</sup> Funds used refer to the amount of funds committed in signed contracts, and the portion of the funds committed that has already been disbursed.

<sup>&</sup>lt;sup>8</sup> Available funds equal pledges minus commitments.

<sup>&</sup>lt;sup>9</sup> Financing gap equals total needed minus pledged funds.

 $<sup>^{10}</sup>$  Request for additional funding from the FCPF (up to US\$ 5 million, subject to conditions set by Resolution PC/10/2011/1.rev being met).

Component 6	24	24	81	56		0	0
TOTAL	3,800	3,800	923	717		0	0
Sources of Funds (in US\$ thousands)							
FCPF [specify activities being supported by the FCPF]		3,800					
Government [specify activities being supported by the Government]		0	0	0	0		
UN-REDD Programme (if applicable) [specify activities being supported by the UN-REDD]		0	0	0	0		
Other Development Partner 1 (name) [specify activities being supported by the Development Partner]		0	0	0	0		
Other Development Partner 2 (name) [specify activities being supported by the Development Partner]		0	0	0	0		
TOTAL		3,800					

**6.** GRANT REPORTING AND MONITORING REPORT (GRM)<sup>11</sup>(OR EQUIVALENT DELIVERY PARTNER REPORT, AS PER DELIVERY PARTNER'S STANDARD OPERATIONAL POLICIES AND PROCEDURES)

The Delivery Partner prepares a mid-term GRM or equivalent grant monitoring report, which provides a qualitative report on the progress and results of FCPF-financed activities from the Delivery Partner's perspective, and the Delivery Partner's assessment of overall Readiness progress, and should be annexed to the mid-term progress report.

## 7. SUMMARY STATEMENT OF REQUEST FOR ADDITIONAL FUNDING TO THE FCPF

If the Country is requesting additional funding, it presents a summary statement of total additional funding requested from the FCPF to justify the numbers presented in the table on uses and sources of funds, including an explanation of the proposed activities to be financed by the additional funding.

<sup>&</sup>lt;sup>11</sup>*Grant Reporting and Monitoring* is the format and system that is used for reporting on FCPF activities where the World Bank is the Delivery Partner.