



WWF

EXECUTIVE  
SUMMARY

TRABAJANDO  
JUNTOS POR  
UN MUNDO  
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CON EL CLIMA



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# ParLU (Paraguay Land Use)

Executive summary

keywords: REDD+, multi-level approach, landscapes, small-scale producers, food security, human well-being, restoration, value-chains, , indigenous community, community engagement.

## *0. Background and introduction, methodology used in blueprints*

Growing attention to large-scale deforestation and climate change in Paraguay has led to an array of policy measures such as the Zero Deforestation Law and the UN Joint National Programme to prepare for REDD+ (Reducing of Emissions from Deforestation and Forest degradation) strategies in Paraguay. However, it is important to demonstrate that REDD+ forest models complement the initiated preparation process of REDD+ and are sustainable -- promoting sustainable development and climate change mitigation simultaneously.

The “Protecting forest for the benefit of climate, people, and nature in Paraguay” (ParLu) project seeks the integration between human activities and forest conservation in Paraguay. The ParLu project focused on the design and development of measures for REDD+ integration with a multi-level approach for various political, social and economic factors.

This blueprint document examines these issues in the light of recent project evidence on alternative livelihoods, sustainable forest management, payments for ecosystem services (PES) and experiences with reduced emissions from deforestation and degradation. The promotion of pilot projects with indigenous and smallholder communities were particularly emphasized, focusing on their context, the community needs for the development of alternative livelihoods.

The objective of this document is to compile and share lessons learned which include success factors, best practices, limitations and opportunities. Ultimately, the blueprint provides general recommendations on REDD+ country preparation and aims to propose activities adept for scaling up, which could inform future national climate change and REDD+ strategies and land-use policies in Paraguay.

## *1. National and community starting conditions*

This blueprint emphasizes the experience of 6 pilot projects (See Table 1) with smallholders and indigenous communities in the Atlantic Forest and the Pantanal in Paraguay. However, the ParLu project employs a multi-stakeholder approach with actions at the sub-national (i.e. local, municipal and departmental), national and international level, thereby fostering linkages between research, practice and policy.

- **REDD+ preparation activities need more facilitation, research and lessons learned for building strategies:** At the national level, support by and coordination with the National Technical Team of the UN-REDD Joint National Program was needed in order to deliver effectively on its mandate of facilitating the REDD+ readiness process. Government organizations in charge of REDD+ policies, National Climate Change Policy and the National Climate Change Plan needed more technical information (research) and capacity building for decision making. In addition, the participation and collaboration of the Secretary of the Environment (SEAM), the National Forestry Institute (INFONA) and the Federation for the Self-Determination of Indigenous People (FAPI) had to be promoted to reduce institutional barriers during the readiness process. Moreover, participation by national delegates and technical advisors in international forums (e.g.

Conferences of the Parties) had to be ensured in order to engage in negotiations for the international REDD+ agreement and achieve sufficient buy-in for REDD+.

- **Policy linkages with pilot projects was lacking:** The Paraguayan REDD+ readiness process lacked institutional ownership in developing actions for pilot projects in order to integrate lessons learned for emerging national REDD+ policies.
- **Pilot REDD+ activities had to be considered in a context of serious deforestation drivers:** While many communities have unique characteristics, most have the following problems in common; (1) mechanized agriculture production expansion replacing traditional agriculture, (2) indiscriminate use of agrochemicals, (3) lack of constant and active presence of authorities enforcing legislation, (4) land degradation, decreasing productivity of plots for self-consumption and generating income, (5) increase in illegally farmed areas (illicit crops).

**Table 1. Piloto sites at the sub-national level**

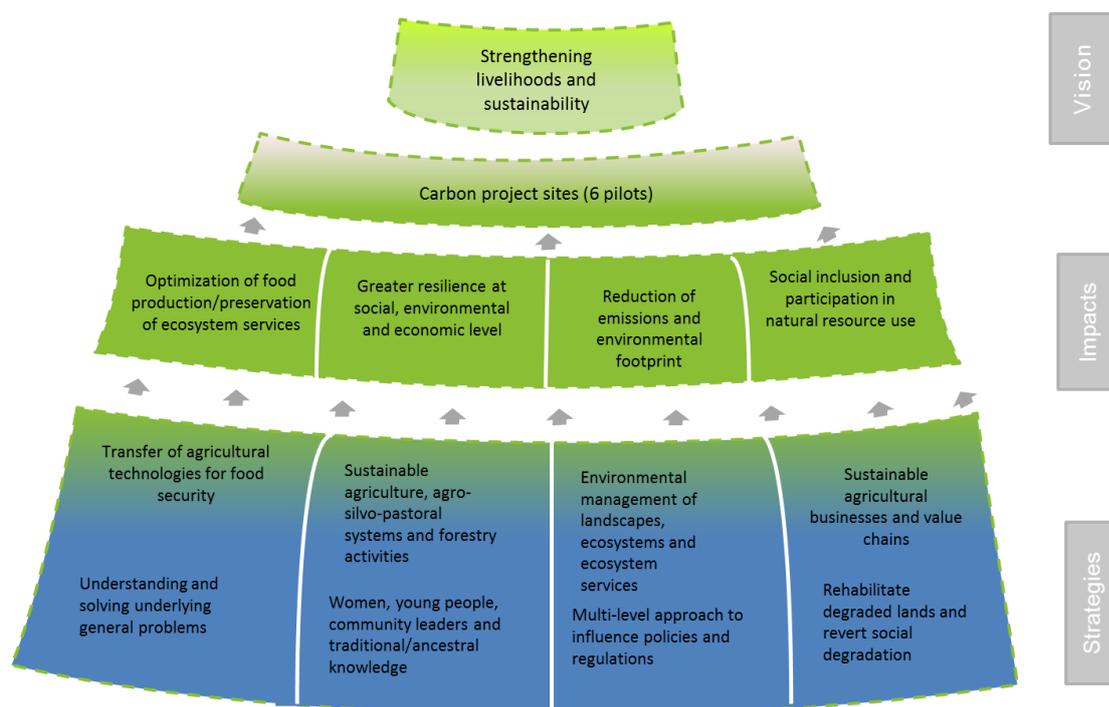
Municipality	Name of the Community	Beneficiaries Number of Families	Type of Community	Surface Area (Ha)
Raúl Peña	Raúl Peña	100	Rural farmer	7.720,8
	Mariscal Estigarribia		Rural farmer	6.429,9
Ñacunday	Lomas Valentinas	47	Rural farmer	3.887,2
	Punta Yobai		Rural farmer	4.212,4
Tavapy	Tavapy I	96	Rural farmer	5.848,7
	Tavapy II		Rural farmer	3.657,7
	Dolores		Rural farmer	752,2
Naranjal	Puerto Barra	38	Indigenous (Aché)	802
Yvy Pyta	Kue Tuvy	80	Indigenous (Aché)	4.629
Bahía Negra	Puerto Diana and Dos Estrellas	40	Indigenous (Yshir)	180.816*
<b>Total</b>		<b>401</b>		<b>218.755,9</b>

## 2. The four overall strategies & expected impacts of the pilot projects

Each one of the implemented pilot projects tried to find viable economic alternatives to deforestation, adapted to the specific characteristics of the respective communities. During the initial phase of the pilots, an inclusive process with the communities helped validate goals along four strategies:

- Transfer of agriculture technology for food security
- Sustainable agriculture, agroforestry and forestry systems
- Environmental management of landscapes, ecosystems and ecosystem services
- Inclusive sustainable agricultural businesses and value chain

As the work at the pilot sites was carried out, the strategies were developed considering additional factors that strengthened livelihoods and sustainability (see Fig. 1).



**Figure 1.** Schematic representation of the strategy, impacts and vision foreseen for ParLU. **Source:** WWF presentation at the 2015 Symposium on Forests and Climate Change in Asunción, Paraguay.

The expected impacts of the pilot projects were:

1. Optimized food production and ecosystem services ensured
2. Greater social and ecological resilience
3. Emissions reduction and environmental footprint
4. Inclusive use of natural resources

### 3. Main findings and success factors of pilot projects

Recognizing the aspect of farmer and indigenous heterogeneity, the main findings are summarized under each of the expected impacts below:

#### 1. Optimized food production and ecosystem services ensured

- Farmers have adopted better practices, increased diversification of food crops such as fruits and vegetables in nurseries. Leaders have been trained in agroecology and diversification of crops, and helped to build capacities and accelerate the adoption of better management practices at the community level.
- Farmers in Raul Peña have improved organic food and cash crop production by using bio-inputs with less use of agrochemicals.
- Smallholder farmers experienced an increase in income generation because of optimized production (medicinal & aromatic plants).

- The high-value Yerba Mate crop has increased production (200 hectares) with the aim to undertake commercial production.

## **2. Greater social and ecological resilience**

- Farmers built tree and plant nurseries to germinate seedlings for Yerba Mate and native forest species.
- Farmers have adopted forest enrichment activities in their forest reserves.

## **3. Emissions reduction and environmental footprint**

- Technical assistance provided support to increase surface area of Yerba Mate plantings in forests (forest enrichment) and reforestation.
- Feasibility studies for Sustainable Forest Management in the Puerto Barra indigenous community showed evidence that this activity was not profitable for this community, and a high risk for implementation in the Kue Tuvy community due to the presence of illicit crops.
- Both Indigenous communities within the project started formalities with SEAM to obtain certificates for Payments for Ecosystems Services, although with little success to date.

## **4. Inclusive use of natural resources**

- Broad coverage of training sessions has facilitated the participation and empowerment of women in the communities. This participation has led to innovative Yerba Mate germination techniques, which has the potential to generate higher incomes.
- Collective marketing of organic production by the Raul Peña community has obtained higher profit margins in nearby urban areas (Ciudad del Este).
- Puerto Barra's Aché people received permits that grant the indigenous community continued access to a large forestland owned by a private agribusiness for traditional uses.
- There is more coordinated decision-making in producers' associations and committees, with the exception of 2 farmer communities with unmet needs of basic services (Ñacunday). This better level of community organization and leadership is directly linked to the level of success across income-generating activities.
- Because of better community organization and adding value to their Yerba Mate production (by technically adapting their tea dryer & carrying out an improvement plan jointly with PTI<sup>1</sup>), communities have more realistic access to both domestic and international markets.
- Indigenous communities' leaders see development opportunities for youth that were involved in pilot activities, which helped secure community support for tertiary level studies.
- Increase in partnership-driven approaches to support resource use in indigenous community lands, which addresses the weakness of short-term, project-focused solutions (e.g. promoting partnership approaches with Itaipú Binational, FECOPROD<sup>2</sup>, as well as with INFONA, SEAM, the Environmental Prosecutor's Office, SENA<sup>3</sup>, SENAD<sup>4</sup> and the Naranjal municipality).

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<sup>1</sup> PTI - Parque Tecnológico de Itaipú [Itaipú Technological Park].

<sup>2</sup> FECOPROD - Federación de Cooperativas de Producción [Federation of Production Cooperatives]

<sup>3</sup> SENA - Servicio Nacional de Calidad y Sanidad Vegetal y de Semillas [National Service for Plant and Seed Quality and Health]

<sup>4</sup> SENAD - Secretaría Nacional Antidrogas [National Anti-drug Secretary]

#### 4. *Main impacts and achievements of the ParLu project*

Beside the pilot projects' results, the ParLu sub-national, national and international activities have supported the Paraguayan government in catalysing specific actions to build the framework of policies and incentives for reducing deforestation and degradation in Paraguay. Various workshops, trainings, international fora participation, baseline research, communication materials and campaigns helped build capacity and awareness of REDD+ issues and policies, both for relevant authorities and for the public. More specifically, thanks to the ParLu project, the Zero Deforestation Law was once again extended for the Oriental Region until 2018. While this moratorium is limited in geographical scope, it currently supports specific REDD+ initiatives such as the National Payments for Ecosystem Services (PES) scheme and a national REDD+ strategy (once finalized and approved). More importantly, these initiatives also support the current economic transitions and shifts to sustainable landscape management as part of Paraguay's current low carbon development plan. As a result, the ParLu project has achieved its primary goal of helping fill the information gaps and accelerate the national REDD+ readiness process.

#### 5. *Practice and policy implications (lessons learned and recommendations)*

These findings, helped identify lessons learned and recommendations for similar projects either in Paraguay or in other regions with similar circumstances

##### **1. At the sub-national, producer level**

- Feasibility studies and developing baselines are key activities during the beginning of the pilot project and help to assess whether REDD+ activities are applicable.
- During the implementation and closing phase of the project, exit strategies (e.g. partnerships, business plans), local capacity building activities, and the proper identification of production alternatives are key in ensuring the sustainability of the project.

##### **2. At the national level**

- Policies that affect the forest and agriculture sector should be coordinated with relevant state institutions. In addition, due to institutional inertia and complexity, innovative actions are of high relevance, however it is a demanding process to facilitate at the policy level.
- Participation of stakeholders must be as inclusive as possible in order to identify value-added partnerships for the project's activities.
- Capacity-building and institutional strengthening is important for post-preparatory phase continuity.

##### **3. At the international level**

- Supporting participation at the international level helps to mainstream activities, (e.g. integrating REDD+ actions at the national, policy level) and may help secure international financing and support.
- While following through recommendations can make REDD+ strategies for local rural and indigenous communities more attractive, sharing lessons learned in international forums is necessary to contribute to the successful implementation of local-level REDD+ projects globally.

## 6. Conclusions

This work emphasizes that while most rural and indigenous communities in Paraguay are trapped in a challenging poverty cycle, new, customized models of agriculture production linked to markets with climate change mitigation activities is a viable REDD+ practice. While the ParLu project, (through close collaboration with WWF's global partners,) helped link pilot experiences, research and the PES protocol to REDD+ policy instruments, additional support is needed for the national-level readiness process to be completed. Partly thanks to ParLu, SEAM and Guyra Paraguay<sup>5</sup> have obtained financial support from the GEF<sup>6</sup> to integrate REDD+ activities with PES. Even though this is positive news, additional support will be needed to build capacities in Paraguay's institutions and to continue the development of key readiness policy instruments (MRV, National REDD+ strategy, REDD+ safeguards).

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<sup>5</sup> Guyra Paraguay is a civil society nonprofit organization working in the defense and protection of the biological diversity of our country and the organized action of the part of the population, in order to ensure the vital space needed so that future generations can know representative samples of the natural wealth of Paraguay.

<sup>6</sup> GEF – Global Environment Fund