



Forest Carbon Partnership Facility

Madagascar ER-PIN

Emissions Reductions Program in the Eastern Humid Forest of Madagascar

Thirteenth Meeting of the Carbon Fund (CF13)

Brussels

October 13-16, 2015

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Political Commitment

- **Political commitment raising to the next level**
 - National Development Plan (2015 -2019) including conservation of natural capital and resilience to climate change (2014)
 - New Environment Development Charter (2015);
 - Environment Policy for Sustainable Development (2015)
- **Long-lasting political commitment** to avoided deforestation and degradation through:
 - 25 years Environment Program
 - REDD National Coordination Office (2014)
 - REDD+ included in INDC (Sept. 2015)
 - Durban vision (2003), Sydney (2014) :
 - Pioneer on community based natural resource management;
- **Commitment to ER Program at the highest level and a cross sectors**
 - Prime Minister and 4 Ministers:
 - Minister of Environment, Ecology, Sea and Forests;
 - Minister of Agriculture;
 - Minister of Energy and Hydrocarbons; and
 - Minister of Decentralization.
- **Numerous consultations** with stakeholders (local communities, technical services, Civil Society, NGO's, private sector).

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ER Program Idea Background/Context

Context:

- Madagascar is among 8 poorest countries: 90% of population lives on less than 2\$ per day
- Agricultural production based on slash-and-burn, agriculture generates 26% of GDP and employs 90% of economically active population;
- Natural capital represents >50% of Madagascar's wealth (without mineral resources) → assessment based on watershed services, carbon stock, biodiversity, tourism;
- Development currently based on acceleration of growth rate that reduces natural capital

The ER Program:

- Departs from traditional conservationist approach towards **development-oriented landscape approach**, connecting forests, land use, and rural development and fostering integration of natural capital values into development policy and implementation;
- Is part of a programmatic approach between the Government (Ministries of Agriculture & Environment) and the World Bank: **Sustainable Agriculture Landscape Project**;
- Has secured further initial investments: 11th European Development Fund, Germany (e.g. one of two African countries for Bonn Challenge), JICA;
- Connects landscapes management with the **devolution of key tasks** to decentralized entities (regions and municipalities).

Madagascar ER-PIN Program Highlights

Vision of the ER Program:

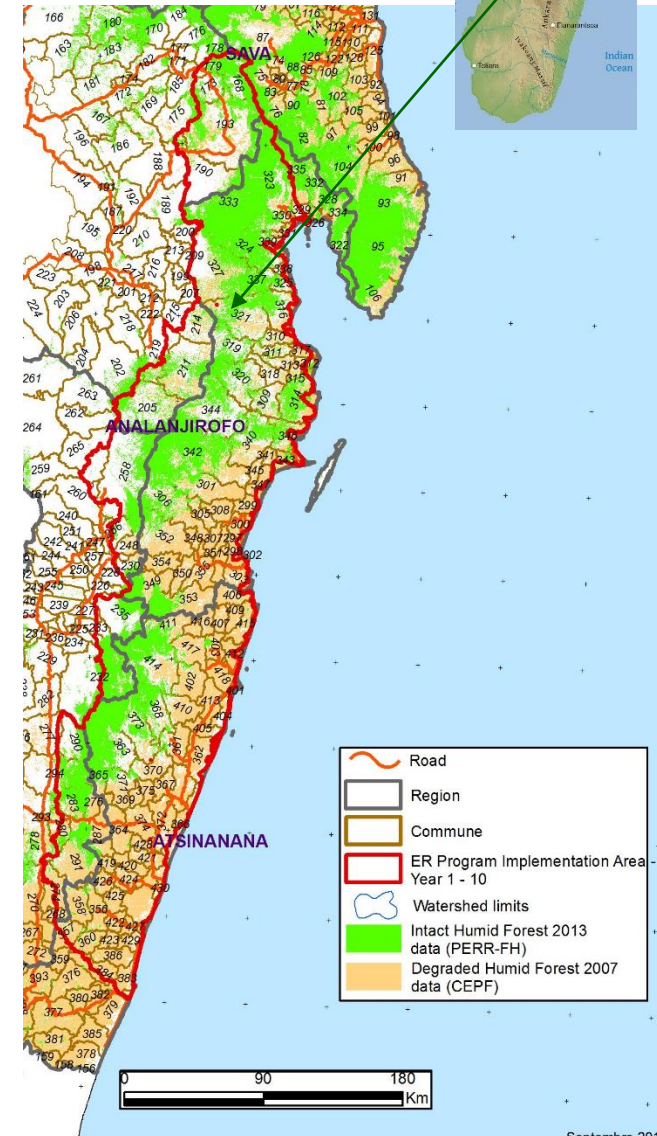
- **Landscape scale:** Watershed management to strengthen the links between agriculture and environment and establish development-conservation nexus;
- **Key concept:** improve livelihood alternatives in the lower lying areas while promoting forest protection and agroforestry on the slopes and upper lying areas of watersheds

Strengths

- **Capitalize experiences** from REDD+ projects (benefit sharing, participatory management), PERRFH (REL/MRV), TAMS (forest restoration, wood energy) , WAVES (wealth accounting & valuation of ecosystem services) and MIVOATRA (community and municipality based forest corridor management)
- **Cross-sectoral coordination** already established anchored under the Prime Minister, including agriculture, forests, environment, water;
- **Significant potential to scale up** watershed management model in entire country;
- **Focus on restoration of degraded forests and lands** (currently unused potential) in addition to forest protection

Madagascar ER-PIN Scale

- ER program defined by
 - **Geography:** 14 Watersheds in 4 regions
 - **Administration:** 171 municipalities grouped in Inter-Communal Public Entities (ICPE)
- Part of Eastern Humid Forest Eco-region
- **Area:** 4,8 million ha (8.1% of the national territory);
- 71% is covered by **forests** (45% intact forest and 55% degraded forest);
- This is 30% of the remaining intact forest of Madagascar;
- In total: **3.1 million people** (13% of national population)



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Country Progress towards Readiness

Components	Assessment of progress
Component 1	REDD+ Platform (December 2015); Decentralized REDD+ Platform (February 2016)
Component 2	Drivers studies (July 2016); National REDD+ strategy (November 2016); SESA/ESMF (November 2016); Grievance and Redress Mechanism (July 2016) National CSO Platform active (ongoing)
Component 3	REL (February 2017)
Component 4	MRV (June 2016) Safeguard Information System (July 2016)

Milestones

- Submission of the Mid Term Progress Report (MTR) by September 2016;
- Submission of Readiness Package (August 2017).

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Drivers and Proposed Program Activities

Drivers	ER Program Activities
Slash and burn agriculture “Tavy”	Land tenure securing, Improvement of agricultural techniques, Setting up and maintenance of agricultural infrastructures, agroforestry, terrace cultivation, development of conservation agriculture and agro-ecology, IGAs
Energy demand	Afforestation and reforestation (fuelwood and timber, private and communal, development with private company), development of alternative sources of energy, dissemination of more efficient cook stoves
Illegal logging	Law enforcement and surveillance, conservation/protection, active ecosystem restoration of degraded forests, IGAs.
Artisanal mining	Law enforcement and surveillance, management area planning, support of IGAs (fish farming, apiculture etc.).
Pasture	Fire prevention and firefighting (awareness and firewall management), professionalization of farming sector, improved control process of farmers.

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Reference Level

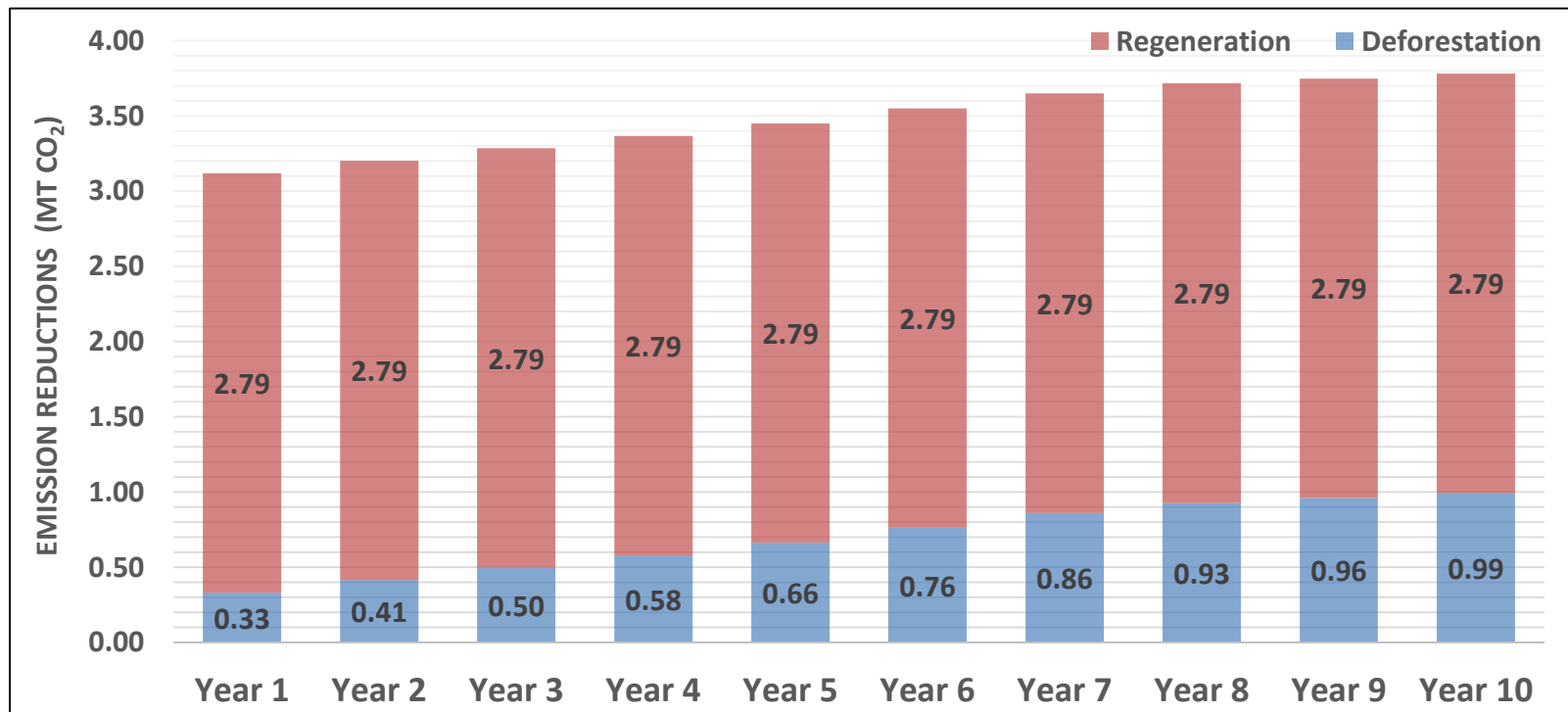
- Building on Eastern Humid Forests ecoregion REL works;
- **Reference period:** 2005 – 2013 → 8 ans (analyse 2005 / 2010 / 2013);
- **Carbon pools:** AGB, BGB, SOC;

	Reference Level (Million TCO ₂ /Year)	HYPOTHESIS
DEFORESTATION		
Intact forests	4,31	projected on the basis of the historic average for all municipalities (2005-2013)
Degraded forests	1,70	Hypothesis: Intact forest deforestation % = degraded forest deforestation %
CARBON STOCK INCREASE		
Intact forests	0	Hypothesis: IPCC (1.3 T C per ha per year) or measured
Degraded forests	0	Hypothesis: to be measured: linear downward trend expected, to be projected on the basis of the historic average (2005-2013)

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Emission Reductions Generated

- For the accounting area of 14 watersheds in 4 regions:
 - For the **first 5 years**, a total of **16.42 MT CO₂** of emission reductions is expected;
 - In the **10 year period**, this number achieves **34.87 MT CO₂**.
- Expected emission reductions over the 10 years of the Program:



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Non-carbon Benefits

- Boosting **agricultural productivity** and **rural livelihoods** and developing local economies in a durable manner;
- Accelerating **land tenure certification** process resulting in **land security**;
- **Effective devolution** of land management to decentralized authorities and local communities;
- **Protection of biodiversity** in one of the most ecologically rich areas of the world;
- **Curbing illegal traffic** of precious woods through better **forest monitoring and governance** and through **new development opportunities** to local population.

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Diversity and Learning Value

- **Shift towards development-based landscape management** to leverage development impacts;
- **High potential to scale up ER program model** to national level;
- Combination of forest protection and **regeneration of degraded forests and lands** through landscape approach;
- High impact for both carbon and **non-carbon benefits**;
- Strong case to harness **community based management** and municipal level engagement.