



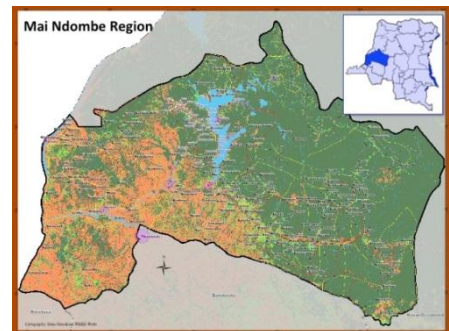
## Summary: Mai Ndombe Emission Reduction Program, DRC

### SNAPSHOT

*The Government of DRC views the Mai Ndombe Emission Reduction (ER) Program as a first step in implementing the DRC REDD+ strategy at jurisdictional level, as a model for Green Development in the Congo Basin and as a key test of climate action on the African continent and for HFLD countries. This is a unique opportunity to establish a flexible framework to secure long-term public and private finance for delivering emissions reductions, poverty reduction and sustainable development at scale.*

**Program Goal:** A model provincial green development program that provides alternatives and rewards performance to address the challenges of climate change, poverty reduction, natural resource conservation and protection of biodiversity.

**Jurisdiction Area:** Mai Ndombe region, Democratic Republic of Congo (including current Plateau and Mai Ndombe Districts)  
- 12.3 million hectares total area  
- 9.8 million hectares of forest



**Duration:** 2016 – 2020

**CO2 Reductions:** 29 MtCO<sub>2</sub> estimated to 2020 (equivalent to annual emissions of Cape Town)

**Budget:** USD 60 million plus estimated performance revenues of USD 202 million  
**The Proposal is for FCPF Carbon Fund to enter into ERPA for 10M tons over 5 years**

**Partners:** Government: National Coordination REDD+ (CN-REDD), Direction of Sustainable Development (DDD), MECNT, Direction of Inventories and Forest Improvement (DIAF), Ministry of Finance, Committee for Technical Reform, Province of Bandundu. Civil Society: Groupe de Travail Climat REDD+ (GTCR), IIASA/OGF (Observatoire de la Gouvernance Forestière), Satellite Observatory of Central Africa Forests (OSFAC), REPALEF, WWF. Private Sector: Federation of Wood Industries, NOVACEL, SOGENAC, WWC. Donors and Technical Partners: CBFF, FIP, BMU-KFW, JICA/JAFTA, NORAD, UN-REDD, USAID/CARPE, VCS, and CCB.

### Location - The Mai Ndombe Jurisdiction

- One of highest current and potential deforestation areas in the Congo Basin due to proximity to Kinshasa
- A high poverty region with opportunity for improving natural resource governance and economic productivity
- Lake Mai Ndombe is the world's largest Ramsar site - "Tumba-Ngiri Mai Ndombe"
- Large part of the global range of the bonobo (*Pan paniscus*) - the closest relative to humans - as well as important elephant, buffalo, hippopotamus and leopard populations.
- Includes the USAID/CARPE landscape of "Lake Tele-Lake Tumba", the classified forest of Domaine de Chasse Oshwe and parts of Salonga National Park and Tumba-Lediima Nature Reserve
- Overlaps and will be integrated with FIP "Integrated REDD+ Sub-Project in the Plateau District (PIREDD)".

### Political Support

The ER-PIN preparation has received the highest political support from central and provincial government and has been presented at several formal national and international events.

- Concept of "Green Development" initiated in DRC by His Excellency, Head of State, President Kabila at a High-Level Forum on Forests and Climate Change in Oct 2011.
- ER Program first proposed to the Carbon Fund in Santa Marta, Colombia in June 2012.
- Presentation of the ER Program at UNFCCC COP17 in Durban by DRC Minister of Environment and COP18 in Doha by the DRC Vice Prime Minister.
- DRC Cabinet approved submission of ERPIN in May 2013 (v1) and March 2014 (v2).

## Deforestation and Forest Degradation (in estimated order of impact)

- Primary Drivers - Slash and burn agriculture; charcoal production; bushfire; industrial and artisanal logging.
- Underlying Causes – Poverty; demographic growth; governance; urbanization; political and institutional factors; lack of access to improved cultivation techniques; lack of knowledge.

### Program Activities

As the first large scale REDD+ and green development pilot program in the Congo Basin, the ER Program seeks to initiate climate change mitigation action through a holistic land use and governance capacity building platform that will promote sustainable development activities to take pressure off of forests. This will deliver poverty reduction, ensure food security and enable improved natural resource governance. The ER Program is an umbrella program that will develop overarching plans, priorities, and principles for land use and forest management activities determined to be most relevant to communities, climate change mitigation efforts, poverty alleviation and biodiversity conservation. It will seek to address **five objectives** linked to the carbon benefits and non-carbon co-benefits of the UNFCCC. Indicators draw from the FIP Results Framework, and the [5 Guiding Principles of REDD+](#).

ER Program Objectives by 2020	Indicators (proposed)
<b>1. CLIMATE.</b> Achieve a reduction in emissions of 29Mt CO <sub>2</sub> e against the REL in the face of rapidly increasing pressure	$\Delta$ CO <sub>2</sub> emissions
<b>2. BIODIVERSITY.</b> Maintain and enhance biodiversity and ecosystem services	$\Delta$ forest connectivity, target species
<b>3: RIGHTS.</b> Statutory and customary rights to lands, territories and resources are recognized, respected and strengthened	$\Delta$ tenure security – community and concessions, quality of participation, people trained in FPIC, land with participatory zonation and management
<b>4. LIVELIHOODS.</b> REDD+ benefits are shared equitably and improve long-term livelihood security and well-being of stakeholders with special attention to the most vulnerable groups	$\Delta$ MDG and SDG integrated indicators
<b>5. FINANCE AND GOVERNANCE:</b> Mobilize immediate, adequate and predictable resources to reward performance in priority forest areas in an equitable, transparent, participatory and coordinated manner	$\Delta$ institutional capability, resolution of grievances, Funds received and utilized at local level, Uptake of learning

The table below outlines activities to address drivers of deforestation and degradation in each land use category in the region. **Two categories of activities** are envisaged - (1) **Enabling**: which establish the basis for achieving emission reduction but do not achieve reductions themselves (e.g. education and outreach of REDD+; local government strengthening, land-use planning, law enforcement); and (2) **Emission Reducing**: which directly reduce CO<sub>2</sub> emissions (e.g. re-forestation, conservation concession, reduced-impact logging, fire reduction, agroforestry).

Land Use (area M ha)	Causes of deforestation, degradation or prevention of natural regeneration	Agents	Planned Activities to Address Drivers (area impacted M ha)
<b>Customary Lands - Afforested (4.34), Non afforested (2.58)</b>	Unplanned deforestation (UDef): slash and burn, wood energy production for Kinshasa market, illegal artisanal logging, bushfires preventing natural regeneration. Planned degradation (PDeg): legal artisanal logging	<i>Local Population, Artisanal Loggers</i>	<ul style="list-style-type: none"> <li>• Enabling activities, concession boundaries definition, PES, community forest areas, strengthening forest control, awareness (2.2).</li> <li>• Technical training, enforcement (0.2).</li> <li>• Agroforestry, PES, reforestation, savannah protection, awareness and enhancement (1.0).</li> </ul>
<b>Forest Concessions (2.77)</b>	PDeg: logging and logging infrastructure. Unplanned deforestation (UDef): agricultural incursion into concessions and set asides	<i>Forests Companies, Local Pop</i>	<ul style="list-style-type: none"> <li>• Reduced Impact logging, PES (1.0)</li> <li>• Implementing CLD, CARG, land use plan, control, PES in concession boundaries.</li> </ul>
<b>Protected Areas (2.04)</b>	UDef: slash and burn agriculture, fuelwood production, small-scale illegal logging.	<i>Local Population</i>	<ul style="list-style-type: none"> <li>• Strengthening governance, control, synergies with conservation, PPP with concessionaires (2).</li> </ul>
<b>Agribusiness concessions, farms (0.80)</b>	UDef: natural regeneration prevented by bush fires to maintain pasture for livestock and for agriculture purposes.	<i>Agribusinesses, farms owners and local pop</i>	<ul style="list-style-type: none"> <li>• Land use plan of the territories and PES applied to support owners. Promotion of certification standards for specific agribusiness (0.4).</li> </ul>
<b>Revoked Forest Concessions (0.23)</b>	UDef: artisanal forest exploitation, slash and burn agriculture, wood energy.	<i>Local Population</i>	<ul style="list-style-type: none"> <li>• Creation of conservation concessions or community forest areas (0.23)</li> </ul>
<b>Mining concessions / infrastructure (&gt;0.01)</b>	PDeg: forest loss for mining and public infrastructure such as roads, power lines, etc.	<i>Mining Concessions and the State</i>	<ul style="list-style-type: none"> <li>• Strengthening governance, implementation of the legislation and of the REDD+ and Mining Governance Matrix. (0.01)</li> </ul>
<b>Total Area 12.3 M ha</b>		<b>Intervention totals: 7.2 Mha</b>	

The ER Program is organized according to the Seven Pillars of the National REDD+ Framework Strategy 2012, which are grouped into **four Program Components**: (1) Governance and Demography, (2) Land use planning and land tenure, (3) Forests and (4) Agriculture and Energy. Each will be an operational unit within the Program, with management lead and activities contributing to Program goals. The Program design thus ensures direct roll up of results into the National REDD+ Strategy and its MRV structures.

### **Institutional Arrangements**

A partnership to coordinate the ER-PIN and Design Phase has been established through an MOU between CN-REDD, GTCR, WWC, and WWF. A broader inclusive MOU establishing deep stakeholder engagement throughout the Design Phase is currently being finalized. The ER Program will be overseen by a **Board of Direction**, composed of the national government and the provincial government. This structure will provide policy and management oversight and ensure a coordinated approach among major actors in the Maï Ndombe region. In addition, an **Advisory Board** will be instituted, composed of stakeholders, which will be selected during the Design Phase, to provide policy and management recommendations. A **Program Management Unit** will be responsible for day-to-day implementation and will be organised according to the four Program Components above.

### **SESA and ESMF**

DRC is the most advanced country in Africa in terms of REDD+ readiness package. The SESA and ESMF processes have made significant progress since June 2013. The SESA Management Framework was reviewed by provincial actors, and was revised in February 2014 based on the province-level input. The National Validation workshop will take place in the first half of 2014, with the final draft to be posted on the World Bank website shortly after its validation.

### **Stakeholder Consultation**

The ER-PIN was prepared through an extensive consultation process over the course of three years including around 100 organizations who contributed through a broad range of stakeholder consultations, meetings, national validation workshops and working groups, with specific attention to indigenous people. Drafting was finalized by the government REDD+ agency CN-REDD, with support from WWF, WWC and the NGO "Groupe de Travail Climat REDD (GTCR)".

### **Rights to Land**

DRC currently allows local community members and indigenous people customary access to their forests for artisanal usage. Clan-owned forests have clear boundaries and clan leaders (*chefs de terre*) are consulted for access to the forest for hunting, agriculture and any other resource or spiritual needs. Although lacking legal force, customary tenure has moral legitimacy, and strong cultural heritage. The ER Program will ensure that customary lands use is recognized in official land planning and implementation. Mapping of community forests is a central activity which will provide the basis for emission reduction contracts and give recognition to traditional usufruct and stronger tenure rights at District and Provincial level, in lieu of a national registry of tenure.

### **Benefit Sharing**

The benefit sharing mechanism will be implemented on a pay-for-performance model, based on emissions reduced and carbon sequestered, or proxies related to these metrics. In addition, the ER Program will set aside funds earned through emission reductions for enabling and non-carbon-based activities that contribute to the capacity of the Program to reduce emissions overall. All stakeholders agreed to a set of principles for benefit sharing, which include registration in the national registry, application of FPIC, priority support for smaller activities and projects, transparency, measurement training and involvement of indigenous and local communities in monitoring and benefit management. Specific principles have been developed which advantage the smallest ER sellers of ERs and which allow sales to be delayed until all Activities can benefit. A full Benefit Sharing Plan and Mechanism will be developed in the Design Phase, drawing on the experiences of WWC (Lac Maï Ndombe REDD+ project, and the Kasigau Corridor REDD+ project in Kenya), WWF (Eco-Makala and Luki projects, DRC and the Proambientale PES program of Acre, Brazil), among others.

### **Reference Emission Level**

The Reference Emission Level (REL) will be developed following FCPF MF guidelines and stratification by land use, land cover and activities in Unplanned Deforestation, Planned Deforestation, Planned Degradation and Afforestation/Reforestation (A/R). The early action VCS Validated Maï Ndombe REDD+ project, (a partnership between WWC and the DRC Government), and the adjusted project-specific REL is currently nested within the Unplanned Deforestation module. Overall, the approach for stratification allows for single ER activities to perform against the historic emissions relevant to their threat, thus improving the overall efficiency of the ER Program.

A preliminary estimate of historic emissions from these REL modules was calculated based on Hansen and Popatov, making reference to VCS- and CDM A/R methodologies. The magnitude of emission levels is highly dependent on the choice of initial carbon stocks, residual carbon stocks and resulting emission factors. For this ER PIN version, solely ground-based carbon stock data were considered (may be more accurate than remote sensing based biomass estimates in ERPIN V1), as reported by a regional (i.e. not whole province) carbon stock study by Bastin (2011). This data will be refined during the Design Phase based on ongoing initiatives. Finally, the assessment of the adjustment factor was amended. This ER PIN version assumes an adjustment factor of 0.57% and proposes a detailed approach for quantification during the Design Phase.

Estimate of Historic Emissions by REL Module	
Sub-Module	Total Emissions (tCO <sub>2</sub> )
Unplanned Deforestation	19,269,454
Planned Deforestation	1,090,709
Planned Degradation	4,474,111
Afforestation	186,722
REL w/o Adjustment	25,020,996
Adjustment	4,919,018
REL w Adjustment (AREL)	29,940,013

## MRV

The ER Program MRV system will be based on the framework of the national MRV system and will integrate the tools and methods of the jurisdictional and nested program into the national system to ensure consistency. The MRV system will be designed to integrate with the Satellite Land Monitoring System (SLMS) using TerraCongo, the National Forest Inventory (NFI) and the National Greenhouse Gas Inventory (I-GHG). A number of principles have been agreed among stakeholders for Program MRV. The ER Program and all nested projects will use methodological approaches being applied for the National Forest Inventory. All future carbon stock (inventory) data and details of REDD+ activities undertaken will be monitored and reported in a manner that enables full and complete incorporation into the current national MRV system. Local communities' expertise and skill will be utilized in the design and implementation of the MRV system. Participatory MRV activities are planned including community involvement in field carbon data collection, local training in biodiversity and social monitoring and use of crowd-sourced verification tools such as [MOABI](#). The ER Program will adhere to the Verified Carbon Standard (VCS) Jurisdictional and Nested REDD+ (JNR) standard, the UNFCCC guidelines and FCPF Carbon Fund Methodological Framework.

### Key Revisions Between ERPIN Version 1 (17 May 2013) and Version 2 (7 March 2014)

**ERPIN V2 has been revised to address the key issues raised by the Carbon Fund Participants Committee.** It includes a more coherent approach to drivers, a new institutional model and more detailed principles for benefit sharing. A revised REL and adjustment is included, and the ERPIN budget considers how to manage payments to achieve the most effective mix of enabling and emission-reducing interventions across the landscape. **V2 represents a deep collaboration and agreement among actors** from the community, government and corporate sector.

- A. Drivers.** The ER-PIN draws on three studies at District, Territory and project level (Table 3), which agree on slash and burn agriculture as the primary driver in the region. Program Activities are organised to address these drivers, and the scale of potential impact to forested lands is estimated (Table 4). A Province-wide analysis of drivers of deforestation is a priority action for the Design Phase.
- B. REL.** The REL section has been significantly revised, with the finalization of the Methodological Framework. In an effort to be conservative in advance of more comprehensive analysis, the 0.1% **adjustment** made available for HFLD countries is currently not taken up fully but rather a more conservative 0.057% adjustment is used. A quantitative assessment of the adjustment factor will be produced in the Design Phase.
- C. Institutional Arrangements.** A much more detailed structure is proposed, that establishes a clear simple and efficient mechanism for managing the ER Program.
- D. Benefit-sharing Mechanism.** Additional principles guiding the design of benefit-sharing arrangements have been developed. Potential mechanisms for ensuring the support of smaller, emerging activities have been described, and will be further developed during the Design Phase to ensure the pro poor orientation of the program

Areas identified for **further attention in the Design Phase** include: a detailed jurisdictional drivers analysis, further definition of Program governance, completion of benefit-sharing mechanisms, stratification of adjustment, etc.

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