FOREST INVESTMENT PROGRAM

DEMOCRATIC REPUBLIC OF THE CONGO (DRC) INVESTMENT PLAN

MONITORING AND REPORTING

Investment Plan Endorsement Date				**06/30/2011**
Lead MDB				**World Bank (IBRD)**
Other MDBs				**AfDB**
Reporting date (mm/dd/yy)				**08/28/2014**
	Title	**Implementing MDB**	**FIP Funding approval date**	**MDB approval date**
Projects/Programs	Improved Forested Landscape Management Project	IBRD	3/10/2014	06/24/2014
	Integrated REDD+ Project in the Mbuji-Mayi/Kananga & Kisangani Basins	AfDB	8/27/2013	9/11/2013

DRC **Lead MDB: World Bank**

Other Implementing MDBs: **AfDB**

Endorsed FIP funding (million USD): **60**

Co-financing (million USD): **0.6**

Level: Investment Plan (IP)

Reporting period **From** mm/dd/yy : To mm/dd/yy

Table 1.1	Unit	Reference emissions level/ Baseline (If applicable)	Target 1 *(Expected results after the financial closure of the last project/ program under the investment plan)*	Target 2 *(Lifetime projection of expected results of projects/programs under the investment plan)*							Report year 2014	Report year 2015	Report year 2016	Total actual to date
				Enhancement of stock		GHG emission reduction								
				A/R	RNA	Community forestry	Improved carboni-zation yield	Improved cookstoves	Alternative energy biogas	Total	Actual annual	Actual annual	Actual annual	
GHG emission reductions/avoidance/ enhancement of carbon stock (Total)[1]	Million tons of CO2 equivalent	AfDB: - 0. 29 WB: -1.86	AfDB: - 0.95 WB: 3.25	-	-	-	-	-	-	18,073,977[2] (IP for 30 years) AfDB: 4.00 (for 25 years) WB: 16,085,524 (for 15 years)[3]				
GHG emissions from reduced/avoided deforestation and forest degradation	Million tons of CO2 equivalent	AfDB: 0.29 WB: 1.86	AfDB: 0.18 WB: 2.45	-		6,415.93	85,749	490.56	349,943	7,341,377				
GHG sequestered through e.g. natural regeneration, re- and afforestation, and other related activities	Million tons of CO2 equivalent	AfDB: 0 WB: 0	AfDB: 0.77 WB: 0.802	10,177,200	554,440			-	-	10,731,600				
Type of forest(s)				AR/R Plantations of fast-growing forest	RNA Shrubby savanna	Community forestry (primary forest)								

[1] Where possible, countries are encouraged to disaggregate total GHG savings into GHG emissions from reduced deforestation and forest degradation and GHG emissions sequestered (enhancement of carbon stocks, reforestation, afforestation etc). If this is not possible, a simple total is fine.

[3] The World Bank methodology for the IFLMP is presented in the IFLMP PAD (pp. 91-98).

				species							
Area covered		ha		IP[4]: 26,700 AfDB: 10,500 WB: 20,000	IP: 73,050 AfDB: 00 WB: 00	IP: 190,000 AfDB: 00				IP: 289,750 AfDB: 10,500 WB: 20,000	
IP lifetime		years								30	

	Please specify methodology (ies) used for GHG accounting (e.g. by project/program), including the start year and period for the Reference Emissions Level	1. ANNEX 1: GHG accounting methodology under the Investment Plan 2. ANNEX 2: GHG accounting methodology under the AfDB/REDD+MBKIS Project 3. The methodology used by the World Bank for the IFLMP can be found in the IFLMP PAD (pp. 91-98).	
	Please provide a brief description of the interventions (context and objective).	Please find an overview on the next page	
1.	2. What have been key contributions (successes) of FIP regarding GHG emission reductions / avoidance / enhancement of carbon stock in your country context during this reporting year??		
3.	4. What have been your key challenges and what opportunities for improvement do you see?		

[4] IP: Investment Plan

		National	Local
Enabling activities	Modernization and promotion of land tenure security	-Land tenure diagnostic -Methodology for defining land tenure reform -Capacity building	-Rural land use plans -Participatory surveying -Property registries
	Land use planning	-Support for land use planning (SNAT and SPAT) -Capacity building	-Micro-zoning of village land
	Support for new projects	-Capacity building for service companies, the administration and civil society	-Project development support
Sectoral activities		Local	
	Biomass energy	-Agroforestry in the broadest sense (afforestation/reforestation, assisted natural regeneration) -Dissemination of improved cookstoves; Improved carbonization yields; Alternative energy	
	Community forestry	-Informing and increasing the awareness of local governments, communities and indigenous peoples -Support for organizing local communities and indigenous peoples (including the creation of SMEs) -Community development plans -Forestry management plan -Training trainers	

Annex 1: FIP/Investment Plan Budgeting Assumptions

The assumptions for evaluating the budget for each activity in each program and the potential GHG emission reduction or carbon sequestration:

- Afforestation / Reforestation: cost of USD1,500/ha; 30-year period; sequestration of 13.2 tons CO2e/ha/yr (Ibi Batéké model).

- Assisted Natural Regeneration: cost of USD1,000/ha; 30-year period; sequestration of 6.6 tons CO2e/ha/yr (conservative estimate).

- **Community forestry:** 30-year period, budget valuation using the ForCom (FFBC) model with some changes to account for budget increases needed for stepped up community monitoring; Reference level: OSFAC 2010 deforestation rates; assuming reductions of deforestation by 0 percent, 10 percent, 20 percent and 60 percent respectively in the first, second, third, fourth years and in the fifth to thirtieth years.

- **Improved carbonization yields:** 10-year period, cost of a semi-industrial kiln at USD40,000, emissions per kiln estimated at 641g CO2e/kg of charcoal produced (TZ policy note, 2009); 20 percent carbonization yield improvement; charcoal price USD200/ton (source: PAD DI).

- **Improved cookstoves:** emissions of 140g CO2 per use (TZ policy note, 2009); cost of setting up production centers: USD200,000 to USD300,000, depending on the region; cost of adaptation testing series: USD20,000 to USD50,000, depending on the region; cost of an awareness campaign: USD300,000 to USD700,000, depending on the region; cost for the institutions per improved cookstove: USD30 to USD130.

- **Biogas** with methane emissions of 0.3 tons CO2e/ton of organic matter; cost of installing a compact biogas plant at USD5,000 to USD10,000; cost of installing a biogas waste plant at USD100,000.

Annex 2: AfDB/REDD+ MBKIS Project: Estimated carbon produced by forestry activities

- Increase in carbon stocks: **3,042,423 tons of CO2**
- Avoided deforestation: **795,423 tons of CO2**
- Avoided forest degradation: **242,423 tons of CO2**

These figures include a 30 percent discount to:

- Be conservative in our assumptions,
- Account for the risks of leakage and impermanence,
- Account for the difficulty of valuing the outcome of certain activities (e.g. improved cookstoves) on the basis of sales of carbon credits.
- Increase in carbon stocks: plantation, enrichment, micro-afforestation, agro-forestry

Main assumptions:

- For local plantation and micro-afforestation, the annual sequestration rate per hectare is 32 tons of CO2 for Kisangani and 17 tons of CO2 for the Mbuji-Mayi and Kananga region (Boulet, 1997).[5]

- For enrichment, the annual sequestration rate per hectare is estimated at 10 tons of CO2 for Kisangani and 8 tons of C02 for the Mbuji-Mayi and Kananga region.[6]

- For the agroforestry systems, the annual sequestration rate per hectare is estimated at 12 tons of CO2 for Kisangani and 10 tons of C02 for the Mbuji-Mayi and Kananga region (Bisiaux et al., 2009).[7]

- The volume of wood harvested is equivalent to that grown (sustainable harvesting) after 6 years in the agro-forestry systems, 10 years in micro-afforestation and 25 years in plantations. There are no plans to harvest wood in the enrichment systems.

- The actual reforested areas correspond to 30 percent of the total area concerned by enrichment.

- Each reforestation operation takes 3 years.

Sequestration rate * reforested area since the beginning (each year until harvesting)
Plantations (6,500 ha): 3,192,000 tons of CO2
Micro-afforestation (5,000 ha): 633,333 tons of CO2
Enrichment (4,000 ha): 231,000 tons of CO2
Agro-forestry (5,500 ha): 290,000 tons of CO2
Total: 4,346,333 tons of CO2
Total (after 30-percent discount): 3,042,423 tons of CO2

Avoided deforestation

Main assumptions for buffer areas and reserved forest:

- The deforestation rate in the baseline scenario is the estimated historic trend of 0.49 percent in the Kisangani region and 0.69 percent in the Mbuji-Mayi and Kananga regions.

- After 4 years, deforestation is reduced to 0 percent in the buffer areas and reserved forest through forest conservation action and agricultural intensification action.

- It is conservatively estimated that a hectare of forest contains 400 tons of CO2 (Guidance Document for the Program to Reduce the Impact of Subsistence Farming on the Forest, 2010)[8]. All of this CO2 is deemed to be released with deforestation, and the alternative use is generally farming, which produces a very low CO2 content.

[5] With the species Gmelina arborea. The technical itinerary of this species in biomass production has been described by Boulet Gércourt, 1997 Monographie du Gmelia arborea. In *Revue Bois et Forêts des Tropiques* No. 172. March-April 1977. pp.: 3-25.
[6] Current projects with medium-growth species present similar sequestration rates.
[7] With the species Acacia under the Makala project, according to **Franck Bisiaux, Régis Peltier Jean-Claude Muliele, 2009,** Plantations industrielles et agroforesterie au service des populations des plateaux Batéké, Mampu, en République démocratique du Congo. *Bois et Forêts des Tropiques* 2009 N° 3 0 1 (3) 25 **Reboisements / Le Point Sur**: **pp 22-32**.

[8] According to Ex-Act (version 3.4), this figure is greater than 550 tons of CO2 per hectare.

Calculations for the buffer areas and reserved forest:

400 tons of CO2 * 1,329.4 ha of avoided deforestation over 25 years = **531,760 tons of CO2**
Main assumptions for the soil protection and restoration work and groundwater and soil conservation work:

- This work is estimated to last 3 years and to enrich the soil with 3 tons of CO2 over 10 years. Otherwise, the soil would have been degraded over 20 years leading to deforestation equivalent to 50 percent of the land, as a result of increased need for land.

- It is conservatively estimated that a hectare of forest contains 400 tons of CO2 (Guidance Document for the Program to Reduce the Impact of Subsistence Farming on the Forest, 2010)[9]. All of this CO2 is deemed to be released with deforestation, and the alternative use is generally farming, which produces a very low CO2 content.

Calculation for soil protection and restoration work and groundwater and soil conservation work:
(1500 * 3 * 3.67) + (1500*0.5 * 400) = **316,515 tons of CO2**

[9] According to Ex-Act (version 3.4), this figure is greater than 550 tons of CO2 per hectare.

THEME 1.2: LIVELIHOOD CO-BENEFITS

DRC **Implementing MDB**:		**Level: project/program**	
Executing agency:	**IBRD**	**Project/program title**	Improved Forested Landscape Management Project (IFLMP)
Amount of FIP funding (million USD):	**36.90**		
Co-financing (million USD):	**0**		
MDB endorsement date:	mm/dd/yy	Report date	mm/dd/yy

Table 1.2B *(Please provide individual project /program data)*		Baseline	Target at the time of MDB approval (Final target in 2019)	Report year 2014 Actual annual	Report year 2015 Actual annual	Report year 2016 Actual annual	Total actual to date
*Please use livelihood co-benefits indicators identified in your project/program. Use only **the number of beneficiaries** or households as your metric. If households are used, please indicate the average number of people per household and the source for that information.* *Please also disaggregate for each indicator the number of beneficiaries by gender when possible.*							
1. Indicator 1: *Number of people in forest or forest-adjacent rural communities with increased monetary/non-monetary income over time (FIP Toolkit indicator).*	Total	**0**	**120,000**				
2. Indicator 2: *Number of women and girls in forest or forest-adjacent rural communities with increased monetary/non-monetary income over time (FIP Toolkit indicator).*	Total	**0**	**40,000**				
3. Indicator 3: Number of sectors/chiefdoms with performance-based incentives (project indicator)	Total	**0**	**50.00**				
4. Indicator 4: *Number of participants present at consultation activities during project implementation* (project indicator)	Men: Women: Total:	**0** **0** **0**	**20,000** **10,000** **30,000**				
5. Indicator 5: *Number of ACCES-compliant cookstoves delivered to the Kinshasa market (project indicator)*		**0**	**70,000**				

6. Indicator 6: Number of structures reinforced in the improved cookstoves sector (project indicator)		**0**	**7.00**				
What have been key contributions (successes) of FIP regarding livelihoods co-benefits in your country context during this reporting year?							
What have been your key challenges and what opportunities for improvement do you see?							

THEME 1.2: LIVELIHOOD CO-BENEFITS

DRC Implementing MDB: **AfDB**

Executing Agency:

Amount of FIP funding (million USD): **22.10**

Co-financing (million USD): **0**

MDB endorsement date: mm/dd/yy

Level: project/program

Project/program title

Integrated REDD+ Project in the Mbuji-Mayi-Kananga and Kisangani Basins (PIREDD MBKIS)

Report date mm/dd/yy

Table 1.2B *(Please provide individual project /program data)*		Baseline	Target at the time of MDB approval (Final target in 2019)	Report year 2014	Report year 2015	Report year 2016	Total actual to date
				Actual annual	Actual annual	Actual annual	
*Please use livelihood co-benefits indicators identified in your project/program. Use only **the number of beneficiaries** or households as your metric. If households are used, please indicate the average number of people per household and the source for that information.* *Please also disaggregate for each indicator the number of beneficiaries by gender when possible.*							
1. Indicator 1: Family livelihoods improve by at least 50 percent for women/head of households and youth (FIP Toolkit *indicator*)	*Number of rural micro-enterprises in operation in year 3* *Men:* *Women:* ***Total:***	**4,000**	10,000 10,000 **20,000**				
2. Indicator 2: Number of people attending educational and training opportunities for improved forestry resources, forest landscape management and agro-forestry, etc. (project *indicator*)	Others PA Forestry agents Social-land agents Women's Group/non-timber forest		2,000 500 40 210 800				

	products **Total**		**3,550**				
3. Indicator 3: Number of social and community infrastructures created and operating in year 3 (80 percent women and 20 percent youth) (project *indicator*)		***0***	***70***				
4. Indicator 4: Number of people with new employment opportunities, such as with non-timber forest products. (project *indicator*)		-	***20,000 (Year 3 of the Project)***				
5. Indicator 5: Poverty reduction (%) (project *indicator*)		***87.7% (2014)***[10]	***81.4%***				
What have been key contributions (successes) of FIP regarding livelihoods co-benefits in your country context during this reporting year?							
What have been your key challenges and what opportunities for improvement do you see?							

[10] *Sources: AfDB Statistics Department database (latest update: May 2013; World Bank* WDI*; UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP, National Reports*

NARRATIVE 3.1: THEORY OF CHANGE AND ASSUMPTIONS

Please briefly describe how the FIP will contribute to transformational changes in addressing the drivers of deforestation and forest degradation in your country as presented in the endorsed FIP investment plan? What is the value added of FIP?

The transformational change sought by FIP in the DRC leads to a combination of enabling activities and sectoral activities in a specific geographical area. The proposed enabling activities (land use planning, land tenure) at the national level are also aimed at undertaking fundamental reforms that will take several years, but make it possible to start sweeping transformation of the context in the DRC.

Please describe what has happened since your investment plan was endorsed.

- *The survey of the causes of deforestation and degradation of forests has been completed and submitted for broad consultations to reach a national consensus.*
- *The country has adopted a National REDD+ Strategy*
- *The country has set up a National REDD+ Registry to support REDD+ project endorsement and performance monitoring.*
- *The country is developing a major Emissions Reduction Program covering 12 million hectares. The Concept Note was endorsed by the Carbon Fund of the FCPF.*
- *The five programs under the Forest Investment Plan of FIP in the DRC were merged into two projects that have now been fully formulated. One project is supported by the African Development Bank (AfDB) (with USD22.1 million), and the second is supported by the World Bank (with USD36.9 million).*
- *The preparations for the MRV System are well advanced:*
    - *Terra Congo System (forest monitoring system) is operating;*
    - *National Forestry Inventory is under way;*
    - *Greenhouse Gas Inventory is under way.*

A regional REDD+ project funded by the World Bank has provided support for the countries of the Congo River Basin since 2012.

COVER LETTER

Dear Andrea,

Please find attached the DRC FIP Monitoring Report. A small team of experts, working under our coordination, compiled the report. The team included representatives of the Ministry of the Environment technical departments (Forestry Inventory and Development Directorate; Sustainable Development Directorate; Research and Planning Directorate) involved in the two themes of the report. The other members of the team were a representative of the National REDD Coordination, a representative of the DRC-WWF involved in the REDD Projects and a representative of a civil society group (*Groupe de Travail Climat REDD* – GTCR).

Work is under way to ensure proper oversight of all of the themes in future reports.

The following remarks can be made about this report:

1. The body in charge of MRV in the DRC is the Forestry Inventory and Development Directorate at the Ministry of the Environment (DIAF). The DRC's MRV tool is built on three pillars: (i) a forest monitoring system (TERRACONGO) inspired by the Brazilian model (TERRAAMAZONE), which is already operational; (ii) a National Forest Inventory (Carbon Inventory), with coverage that has just barely been completed in only one of the country's eleven provinces; and (iii) a Greenhouse Gas Inventory.

The Forestry Inventory and Development Directorate is currently estimating the historical baseline for emissions based on the deforestation rates established by the Satellite Observatory for the Forests of Central Africa (OSFAC). The base year is 2010. This information was not yet available at the time of writing, especially for the FIP areas, but the methodology has been mastered.

2. With two FIP Projects implemented by different MDBs (AfDB and World Bank), different methodologies have been used for making estimates during the project design phase. However, these methodologies are well documented. As the project is implemented and future reports are written, we will harmonize the methodology.

3. The results section of the DRC Investment Plan has not yet been revised in accordance with the results section of FIP. This revision is needed to ensure consistency with the monitoring indicators. Furthermore, the DRC Investment Plan selected five programs, but these had to be merged into two projects. This means that the emissions estimates in the Investment Plan are no longer the same. Under the circumstances, we have provided information from three sources for Theme 1.1: (i) Investment Plan (black text); (ii) REDD+/MBKIS (red text); and (iii) IFLMP (blue text).

4. With regard to Theme 1.1, we do not have any estimates at the Investment Plan level, since it says in the document that the estimated amounts will depend on the models used and the budgets appropriated to the various activities, and, of course, most importantly, on new projects that emerge and receive support. Therefore, we have only a summary of the types of co-benefits expected from the various activities under each program.
We are sure that the information will improve as the projects are implemented. We look forward to receiving any comments and advice you may have.

Best regards,

Félicien MULENDA
DRC - FIP Focal Point