

Naoko Ishii

CEO and Chairperson

March 10, 2016

Dear Council Member:

FAO as the Implementing Agency for the project entitled: Congo DR: Community-Based Miombo Forest Management in South East Katanga has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with FAO procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by Council in November 2013 and the proposed project remains consistent with the Instrument and GEF policies and procedures. The attached explanation prepared by FAO satisfactorily details how Council's comments and those of the STAP have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at www.theGEF.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Naoko Ishii

Chief Executive Officer and Chairperson

Attachment:

GEFSEC Project Review Document

Copy to:

Country Operational Focal Point, GEF Agencies, STAP, Trustee



REQUEST FOR: CEO ENDORSEMENT PROJECT TYPE: FULL-SIZED PROJECT TYPE OF TRUST FUND: GEF TRUST FUND

PART I: PROJECT INFORMATION

Project Title: Community-based miombo forest management in South East Katanga			
Country(ies):	Democratic Republic of Congo	GEF Project ID:1	5547
GEF Agency(ies):	FAO	GEF Agency Project ID:	618733
Other Executing Partner(s):	Ministry of Environment and Sustainable Development	Submission Date:	4 January 2016
GEF Focal Area (s):	MFA (CC, LD, SFM)	Project Duration(Months)	60
Name of Parent Program (if applicable): For SFM/REDD+		Project Agency Fee (\$):	430,667

A. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Co- financing (\$)
LD-2	LD Outcome 2.3: Sustained flow of services in forest ecosystems in drylands	Output 2.3 Suitable SFM interventions to increase/maintain natural forest cover in dryland production landscapes	GEFTF	650,000	2,491,594
CCM-5	CCM Outcome 5.2: Restoration and enhancement of carbon stocks in forests and non-forest lands, including peatland	Forest land under good management practices.	GEFTF	2,600,000	3,606,979
SFM/REDD- 1	SFM/REDD Outcome 1.2: Good management pratices applied in existing forests.	Forest area (hectares) under sustainable management, separated by forest type.	GEFTF	937,460	5,000,000
SFM/REDD- 2	SFM/REDD Outcome 2.1 Enhanced institutional capacity to account for GHG emission reduction and increase in carbon stocks	National forest carbon monitoring systems in place (number)	GEFTF	130,000	2,893,021
	l l	Sub-total		4,317,460	13,991,594
	Project Management Cost				500,000
		Total project costs		4,533,333	14,491,594

 $^{^1}$ Project ID number will be assigned by GEFSEC. 2 Refer to the <u>Focal Area/LDCF/SCCF Results Framework</u> when completing Table A.

B. PROJECT FRAMEWORK

Project Objectives:

- 1) To promote the sustainable management and restoration of miombo forest ecosystems in order to reduce carbon emissions from deforestation and forest degradation; and
- 2) To improve the sustainability of livelihoods of local communities through the marketing of wood fuels and non-timbre forest products (NTFP) harvested from sustainably managed forests

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Co- financing (\$)
1. Development of sustainable community forest management systems	TA	Outcome 1.1 miombo forests managed sustainably by empowered communities. Indicators: a) 80,000 hectares under sustainable management by communities by Project Year 5 (PY5) b) Lifetime (20 years) direct carbon sequestration = 2,266,000 t CO2 Lifetime direct emissions avoided = 573,387 t CO2 Outcome 1.2 Enhanced productivity on fallow and cropland. Indicator: a) 10% increase in productivity on 30,000 ha	Output 1.1.1. 50 communities with forest management committees and legal documents granting forest management rights; Output 1.1.2. Simple forest management plans developed and implemented; Output 1.1.3: Biennial capacity development plans for community managers, government services and NGOs developed and implemented (at least 100 field technicians trained and at least 500 men and women from community forest management committees and forest user groups trained); Output 1.2.1. Agroforestry and improved fallow management practices promoted.	GEFTF	3,332,860 LD: 529,400 CC: 1,986,000 SFM:817,460	6,768,670
2. Strengthening the legal framework	ТА	Outcome 2.1 the legal framework presents a clear and simple process for the empowerment of communities for sustainable forest management Indicators: a) approved experimental regulations for the empowerment of the project communities in the Lubumbashi supply zone b) new legal texts addressing gaps in the national legal framework for community forest management undergoing approval.	Output 2.1.1 Experimental regulations for the empowerment of project communities in the Lubumbashi supply zone established through ministerial decree(s); Output 2.1.2 New legal texts addressing gaps in the nation legal framework for community forest management drafted; Output 2.1.3 Compatible legal texts for relevant sectors drafted; Output 2.1.4 A provincial strategy for adapting and replicating sustainable community forest management throughout the	GEFTF	74,000 LD: 10,000 CC: 14,000 SFM: 50,000	500,000

			province.			
3. Knowledge management	TA	Outcome 3.1 Knowledge management facilitates the extension and adoption of best practices and lessons learned Indicator: a) at least one partner initiative adopts/ incorporates best practices identified in the project	Output 3.1.1 A community of practitioners network created and experiences related to SFM routinely exchanged; Output 3.1.2 Miombo Observatory established; Output 3.1.3 Best practices for SFM and SLM incorporated into university and technical schools curricula drylands.	GEFTF	432,000 LD: 32,000 CC: 300,000 SFM:100,000	6,122,924
4. Monitoring and Evaluation	TA	Outcome 4.1 Project implemented and monitored effectively and efficiently Indicator: Effectiveness and efficiency as assessed in midterm and final evaluations	Output 4.1.1 Project M&E system in place Output 4.1.2 Midterm and final evaluations conducted.		478,600 LD: 78,600 CC: 300,000 SFM:100,000	600,000
			Subtotal		4,317,460	13,991,594
			Project management Cost (PMC) ³	GEFTF	215,873 LD: 50,000 CC: 100,000 SFM:65,873	500,000
			Total project costs		4,533,333	14,491,594

C. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Please include letters confirming co-financing for the project with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Co- financing	Co-financing Amount (\$)
National Government	MEDD	In-kind	5,600,000
NGO	University of Lubumbashi	Grant	1,772,000
NGO	Observatoire Satellital des Forêts d'Afrique Centrale	Grant	1,200,000

³ PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below GEF5 CEO Endorsement-Template-January 2013.doc

Total Co-financing			1,300,924
GEF Agency	FAO	Grant	1,300,924
Bilateral	GIZ	Grant	1,350,000
NGO	APRON APAKAT	In-kind	398,000
NGO	Bureau Diocésain de développement	In-kind	1,500,000
NGO	ZEBREAU	In-kind	763,670
NGO	PREMICONGO	Grant	607,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL, AREA AND COUNTRY¹

	Type of Country Name/			(in \$)		
GEF Agency	Type of Trust Fund	Focal Area	Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
FAO	GEFTF	Land Degradation	Democratic Republic of the Congo	700,000	66,500	766,500
FAO	GEFTF	Climate Change	Democratic Republic of the Congo	2,700,000	256,500	2,956,500
FAO	GEFTF	SFM/REDD+	Democratic Republic of the Congo	1,133,333	107,667	1,241,000
Total Grant Re	sources		4,533,333	430,667	4,964,000	

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Co-financing (\$)	Project Total (\$)
Local consultants	684,600	1,000,000	1,684,600
International consultants	438,000	500,000	938,000
	1,122,600	1,500,000	2,622,600

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT?

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

² Indicate fees related to this project

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF⁴

The objectives and outcomes of the proposed project have not changed. Outputs and activities have been refined and reworded where necessary. The following changes have been made:

Project monitoring and evaluation has been separated from component 3, and is now under component 4 Monitoring and Evaluation. This was done because knowledge management activities are intended to continue beyond the duration of the project whereas project M&E activities will be within the project duration – to make this it clear.

It was also decided to incorporate in the design sustainable land management practices, particularly agroforestry and improved fallow practices to improve soil fertility, on agricultural (individual farmers fields) and fallow land, instead of only focusing on management of community forests. This is to address shifting cultivation driven by inherently low fertility of miombo soils combined with modern-day shortened fallows and insufficient nutrient replacement resulting in falling yields requiring more and more intact forest to be cleared.

A.1 <u>National strategies and plans</u> or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPS, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Updates Reports, etc.

NA

A.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities

NA

A.3 The GEF Agency's comparative advantage

Sustainable forest management is a core area of expertise for FAO. Building on its experience over the past 60 years, FAO is supporting SFM worldwide through a comprehensive programme covering aspects of forest management and conservation, environmental and economic aspects of forest utilization, and policy and institutions. FAO provides information on all aspects of SFM, direct technical support to countries through normative and field programme activities, and develops and promotes best practice guidelines and technical tools such as the SFM toolbox www.fao.org/sustainable-forest-management/toolbox/

FAO is a founding member of the UN-REDD Programme, and together with UNDP and UNEP is providing coordinated REDD support to countries, consistent with the "One UN" approach. Under the UN-REDD Programme, FAO is supporting the DRC in the development of its national MRV system. In addition, the organization supports several activities in the Congo Basin, including the harmonization of forest policies and programs in the region.

FAO has been instrumental in the development of community forestry in DRC. FAO supported DRC in the implementation of "Projet de développement et de mise en oeuvre de la foresterie communautaire en République Démocratique du Congo", which led to the development of the national Community Forestry Programme and is the foundation for the proposed project .

FAO is currently supporting the implementation of GEF-funded community-based SFM projects in Africa (e.g. Cameroon) and in other regions, and will ensure exchange of lessons and best practices among these projects.

A.4 The baseline project and the problem it seeks to address:

5

⁴ For question A.1-A,7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question

Following the PPG data collection and analyses, the description of the problem and the baseline has been improved. Please see sections 1.1 and 1.2 in the FAO project document.

A.5 <u>Incremental / Additional cost reasoning:</u> describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The incremental reasoning has been refined based on PPG analyses. Please see section 1.2 and section 2 in the FAO project document.

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

An identification and ranking of risks has been conducted as well as identification of mitigation measures. Overall, the risks are not exceptionally high and should be manageable. Risks, their ranking and mitigation measures are presented in the following table:

Risk	Probability	Impact	Mitigation measures			
Environmental Risks						
Climate change impacts	Medium	Climate change may increase the chances of destructive fire or of forest mortality. It may lead to more frequent crop failure leading people to rely more on destructive harvesting for charcoal.	Mitigation measures included in the design of the project: - building the capacity of communities to manage forest fires, and subsequent inclusion in simple forest management plans; - improvement of the conditions of the forest through restoration and sustainable harvest will improve the biophysical conditions of the forests and increase their resilience to climate change - agroforestry and conservation agriculture techniques in community trainings to contribute to adaptation in crop production.			
Social, governance and	Social, governance and institutional risks					
Traditional authorities may seek to block or to sabotage community concessions for fear of loss of their prerogatives and their control over the resource.	Medium	Project implementation stalled or delayed. Project will not achieve the targets set, and any targets achieved will not be sustainable	The traditional chiefs will be involved from the beginning – a first meeting with traditional chiefs was held during project preparation. The project will continue to develop strong working partnership with the high-level chief Kaponda who supported the FORCOM project and has expressed pride in being the first chief in the area to conserve forests.			
Insufficient political will associated with changes in high ranking key officials, changing priorities, or similar factors.	Low	Project progress stalled	Key Government decision-makers, including the DRC GEF Political Focal Point, will be members of the project steering committee. The project will maintain close communications with key authorities, keeping them briefed on successes and challenges as they develop and on the socioeconomic and environmental benefits of the pilot community forest management systems.			
Opposition by powerful stakeholders who benefit from the existing charcoal	Medium	Project will not achieve the targets set, and any targets achieved will not be sustainable	The project will establish and maintain frequent communications with the actors in the existing market chains. There will certainly be both advantages and initial disadvantages to the new woodfuel production systems to be developed.			

market chain			One major advantage for charcoal buyers and producers is that the organized community groups should be able to provide reliable prearranged quantities of woodfuel at a set time and place.
Insecurity: Low level rebel activity occurred around Lubumbashi earlier in 2013	Low	Project implementation stalled.	Insecurity has been widespread in DRC but not in the Lubumbashi area (apart from the low level incident in 2013). Given the high level of investments in the mining sector, insecurity can be expected to be dealt with rapidly by the Government.

A.7 Coordination with other relevant GEF financed initiatives

The most revelant GEF-funded initiatives that the proposed project will collaborate with and learn from include:

- GEF-FAO Regional Project "Sustainable Management of the Wildlife and Bushmeat Sector in Central Africa" is developing pilot community-based wildlife management systems at eight pilot sites in four Congo Basin countries, including DRC. The Bushmeat project is confronted with many of the same challenges as the Miombo project including the critical need to find interim legal tools to empower pilot communities before national legal frameworks are revised. The Miombo project will maintain close contact to exchange best practices and lessons learned through the lead national executing agency the Ministry of Environment and Sustainable Development and the FAO Lead Technical Officer for these projects.
- GEF-UNDP Project "Building the Capacity of the Agriculture Sector in DR Congo to Plan for and Respond to the Additional Threats Posed by Climate Change on Food Production and Security". The project has one site in the Katanga province. The project will aim to build technical capacities of small farmers and agricultural institutions, diversify livelihood strategies and build climate resilience among rural population and disseminate the best practices. The Miombo Project will maintain close contact, through the knowledge management network, with the Katanga site and will make any pertinent lessons learned and best practices known to pilot communities of the Miombo Project.
- GEF-FAO project "Sustainable Forest Management under the Authority of Cameroonian Councils". The main objective of is to reduce deforestation and forest degradation in council forests in order to improve biodiversity conservation, reduce emissions and enhance carbon stocks, and improve livelihoods of local communities. This objective will be achieved through empowering councils to better manage their forests by improving their technical skills and tools to: implement SFM practices, assess and monitor biodiversity, restore degraded forest areas, measure and monitor carbon stocks, and promote sustainable alternative forest based livelihoods. Of particular interest for the proposed project in DRC will be the management and minotoring of carbon by communities within council forests. Coordination will be mainly through the FAO Lead Technical Unit and possibly through study tours.

B. Additional information not addressed at the PIF stage

B.1 Describe how the stakeholders will be engaged in project implementation

Workshops during project preparation as well as meetings and field visits helped to identify and consult key stakeholders and beneficiaries of this project. A multi-stakeholder Project Steering Committee (PSC) which will bring together all key institutions including Ministry of Environment and Sustainable Development, the Ministry of Agriculture, Coordination Provincial de l'Environnement (CPE), Institut Congolais pour la Conservation de la Nature (ICCN), local NGOs, Agroforêts pour le Développement de Kipushi (AFODEK), GIZ, African Minerals, representatives of local communities and traditional authorities.

A summary of the various stakeholders and how they will be engaged in the project is provided in the table below:

Stakeholders	Expertise and Roles in Project Implementation
Ministry of Environment and Sustainable Development at the central and provincial (Provincial Coordination for Environment and Conservation office) levels	Main executing partner. Responsible for supervision, coordination, participation and monitoring of project implementation. Will ensure that project execution is in line with evolving national and ministerial priorities and policies.
Directorate of Forest Inventory and Forest Management	Will contribute to the development of the Miombo Observatory including a system for monitoring carbon at the level of the pilot community forests.
Other relevant ministries and departments (Ministry of Mines, Min. of Agriculture, Min. of Rural Development among others)	These ministries will be involved in the project, particularly through a multi- sectoral platform that will work towards eliminating conflicts between legal frameworks for related sectors and the legal framework for community forestry.
Traditional authorities, especially the Kaponda Chieftanship	Chief Kaponda has played a pioneering role in forest conservation and has been very supportive of the Miombo Project. Traditional chiefs will play a strong role in community awareness raising on community forest management. The chiefs will play a key role in enforcement, both within the community and when community forests suffer from incursions by outsiders.
Local communities	The main stakeholders for the project. The project will support 50 communities to organize themselves into forest management structures and prepare and implement simple sustainable forest management plans.
PREMICONGO (local NGO)	Experience and expertise in community forestry (at Kikonké), community capacity building, participatory mapping, support for displaced people, monitoring of miner's respect for mining standards, agroforestry research. PREMICONGO will be contracted under an LOA to provide training and support to communities.
Association for the Protection of Nature and for Indigenous People of Katanaga (APRONAPAKAT)/GTCR (local NGO)	Experience in governance, defence of community and indigenous rights, participatory mapping, advocacy, community structuring and focal point for a thematic group under REDD. Will be contracted under an LOA to provide training and support to communities in the preparation and implementation of their forest management plans.
Union of Forest Ecologists (UNEF local NGO)	Experience in community forestry at Kikonke through FORCOM. Will support capacity building and awareness raising.
Diocesan Development Office for Katanga (BDD local NGO)	Experience in organizing and structuring communities, organizational problem analysis, ag extension, capacity building, monitoring and evaluation and promotion of innovation. Will be contracted under an LOA to provide and support services to communities.
BUCODED	Expertise in training and capacity building for community organization. May be contracted under an LOA to provide support services to communities.
Natural Resources Network / Katanga	Has expertise in governance and transparency in the forest sector, institutional management, monitoring and advocacy of natural resources, integration of information, education and communication and in community forestry. The Network will play an active role in the revisions to the legal framework in Component 2.
ZEBREAU	Has expertise in human rights, analysis of legal texts concerning natural resources and support to community organizations. Zebreau will play an active role in the revisions to the legal framework in Component 2.
Institut National de recherche agronomique/Katanga	Expertise in agricultural, agroforestry and forestry research and in climate change. Expected to contribute to knowledge management in Component 3.

University of Lubumbashi and the Institut Supérieur Pédagogique	Expertise in research and training, adult education, forest inventory, REDD and climate change. Will play a key role in the implementation of component 3 on knowledge management.
African Minerals and other Mining companies	African Minerals has supported miombo forest restoration by communities and undertook the first carbon accounting in the miombo zone of DRC. African Minerals and other mining companies will be knowledge management partners and will be encouraged to finance replication of miombo sustainable forest management systems.
GIZ/PBF	The project will collaborate with GIZ on multiple aspects including capacity building, legal reform and knowledge management.

B. 2. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

The project will delivery the following key socio-economic benefits:

- At least 50 communities, with the assistance of the project, will be granted the legal right to establish and implement rules governing access and use of forest and the right to harvest and market forest products, including wood and non-wood products (established community forests). This is a key incentive for communities to invest in participatory forest management, particularly in southeast Katanga.

Legally all land and natural resources belong to the State. People and entities desiring use-rights to land can apply for concessions. Although formal law applies to all land in DRC, application of the law relating to concessions is mostly restricted to urban areas and large holdings of productive land in rural areas. In most rural areas, customary law governs. Under the customary law, groups and clans hold land collectively, and traditional leaders allocate use rights to parcels. The land tenure system is characterized by a juxtaposition of rights, with lack of clarity which undermines tenure security. Moreover, Katanga is a mining province and mining concessions make customary land rights fragile. There have been cases of land grabbing of traditional lands in the province.

This is why assisting communities to be legally recognized entities, recognized by the State with documented rights to control access and use of their lands, is a major benefit.

- Another major incentive is the rapidly expanding circle of severely degraded lands surrounding Lubumbashi that all villagers can see each time they travel to the city. These severely degraded lands produce no charcoal, only minor amounts of non-timber forest products and have severely degraded crop lands. The project will assist communities to restore these severely degraded lands, improve their management and enhance their productivity and therefore wood and non-wood forest products supporting their livelihoods. In additional, the project will deliver technical assistance to improve soil fertility through agroforestry (also to reduce pressure on natural miombo forests) and productivity in croplands.
- Enhanced capacity of communities for sustainable forest management and marketing of forest products. The project will make major investments in capacity building, especially for good governance. Experience shows that investments in community capacity for good governance for NRM usually leads to communities applying these capacities across all of the different challenges and problems they are confronted with. Participatory forest management allows all forest user groups to have their say over how the forests are used and for each of them to defend their interests through the governance systems put in place. The project will intentionally promote gender equality. Typically, woodcutters and charcoal makers are mostly men and most

non-timbre forest products (NTFP) are harvested by women. The charcoal cutters frequently harvest trees with little regard to their value for NTFP. With women represented in community management structures, they will have a say in the development of a hierarchy of relative value of each tree species to be applied in the silvicultural thinning of the managed forests.

B.3 Explain how cost-effectiveness is reflected in the project design

To ensure cost-effectiveness and sustainability of project results, a lot of emphasis has been placed on building the capacity of community support institutions, Government field technicians and NGOs – particularly local NGOs, who will continue providing support beyond the project. Experience from a previous project Projet de Développement et de Mise en Oeuvre de la Foresterie Communautaire (FORCOM) has shown that investing in training NGO technicians as community trainers (NGOs who have proven long-term local experience), and then implementing most of project activities at community level through the trained NGOs, instead of individual consultants, contributes to cost-effectiveness, replication and sustainability of project results.

Collaboration with partners with relevant experience (in Katanga, DRC, the miombo zone, the Congo Basin and West Africa) through the knowledge network that the project will establish is another element that will contribute to cost-effectiveness. Collaboration will ensure that results and products (such as training materials) are shared, and best practices are adapted and replicated in the miombo project and vice-versa.

Another cost effective measure is the use of one site – Kikonke – as the lead site for silvicultural trials, fire management and agroforestry trials. Kikonke will serve as the main awareness raising and demonstration site for interventions, which will then be replicated and adapted first in the other four initial pilot areas and from there to surrounding communities in the charcoal supply zone. This is more effective than conducting trials in all pilot sites simultaneously.

C. DESCRIBE THE BUDGETED M&E PLAN

Monitoring and evaluation (M&E) of progress in achieving project results and objectives will be done based on the targets and results indicators established in the project results framework and annual work plans and budgets. M&E activities will follow FAO and GEF monitoring and evaluation policies and guidelines. The M&E plan will be reviewed and updated, as necessary, during the project inception phase. This will involve: (i) review of the project's results framework; (ii) refining of outcome indicators; (iii) identification of missing baseline information and actions to be taken to collect the information; and (iv) clarification of M&E roles and responsibilities of project stakeholders. The project's M&E system will be established within the first 6 months of project implementation.

The monitoring and evaluation plan is summarized below (details in section 4.6 in the FAO project document).

Type of monitoring and evaluation activity	Responsible parties	Time frame	Budget (USD)
Inception Workshop	National Project Coordinator leads the organization, in close consultation with FAO (BH, LTO and FAO GEF Unit).	Within first two months of project inception	10,000
Inception report	National Project Coordinator (NPC) with inputs from project partners. Cleared by FAO and the Project Steering Committee.	Immediately after the project inception workshop	-

Type of monitoring and evaluation activity	Responsible parties	Time frame	Budget (USD)
Design of monitoring and evaluation system	Monitoring and Evaluation consultant with support from the NPC and FAO Lead Technical Officer	Within the first six months after the project inception	3,000
Field-based impact monitoring and support	PMU with support from other project partners	Continually	315,600
Supervision missions	FAO LTO and FAO DRC	Annual or as required.	Paid by GEF Agency fee
Project progress reports (PPRs)	PMU. Submitted to FAO DRC (Budget Holder). Finalized reports submitted to the FAO GEF Unit by the LTO, and to the PSC by the National Project Coordinator.	Six- monthly	20,000
Project Implementation Review (PIR)	FAO LTO with inputs from the National Project Coordinator and FAO Budget Holder. Submitted by the FAO GEF Coordination Unit to the GEF Secretariat. Final report also submitted to the PSC and the GEF Operational Focal Point by the National Project Coordinator.	Annually	Paid by GEF Agency fee
Reports on co- financing	National Project Coordinator with information from all co-financing partners.	Six monthly and annually as part of PPR and PIR.	-
PSC meetings	National Project Coordinator, DDD, FAO Budget Holder	At least once a year .	40,000
Technical reports	PMU, Consultants, FAO	As appropriate	component budgets
Mid- term evaluation	External Consultant, FAO independent evaluation unit in consultation with the project team and other partners	At mid-point of project implementation	40,000
Final evaluation	External Consultant, FAO independent evaluation unit in consultation with the project team and other partners	At the end of project implementation	40,000
Terminal Workshop and Report	PMU	At least one month before end of project	10,000
	TOTAL		478,600

PROVISION FOR EVALUATIONS

An independent Mid-Term Evaluation (MTE) will be undertaken at project mid-term to review progress and effectiveness of implementation in terms of achieving the project objectives, outcomes and outputs. Findings and recommendations of this evaluation will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term. FAO will arrange for the MTE in consultation with the project partners. The evaluation will, *inter alia*:

- (i) review the effectiveness, efficiency and timeliness of project implementation;
- (ii) analyze effectiveness of partnership arrangements;
- (iii) identify issues requiring decisions and remedial actions;
- (iv) propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
- (v) highlight technical achievements and lessons learned derived from project design, implementation and management.

An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting of the project partners. The FE will aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This evaluation will also have the purpose of indicating future actions needed to sustain project results and disseminate products and best-practices within the country and to neighbouring countries.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(s) ON BEHALF OF THE GOVERNMENT(s): (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

NAME	Position	MINISTRY	DATE (MM/dd/yyyy)
Vincent KASULU SEYA MAKONGA	Directeur du Développement Durable; Point Focal Opérationnel FEM et Point Focal UNFCCC/Rep.Dem.du Congo	Ministry of Environment and Sustainable Development	08/13/2013

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Gustavo Merino Director, Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla 00153, Rome, Italy		4 January 2016	Jean-Claude Nguinguiri, Forestry Officer FAO Subregional Office for Central Africa JeanClaude.Nguinguiri@fao.org	+241 01774783	JeanClaude.Nguinguiri @fao.org
Jeffrey Griffin Senior Coordinator FAO GEF Coordination Unit Investment Centre Division FAO				+3906 57055680	GEF-Coordination- Unit@fao.org

Annex A: Project Results Framework. (either copy and paste the framework from the Agency document, or provide reference to the page in the project document where the framework could be found)

Please see Appendix 1 in the FAO Project Document on pages 50 to 57. A detailed results budget is presented in Appendix 3 on pages 63 to 68.

Annex B: Responses to Project Reviews (from GEF Secretariat and GEF Agencies and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF)

GEF Secretariat Review

31. At CEO Endorsement:

- a) Describe how other drivers are being addressed through activities through other partners.
- b) Clearly distinguish activities that will be undertaken in the community forests vs in the village lands and also clarify on role of the project in implementation of the zoning plans and articulation of activities allowable within each land-use type.
- c) Provide clarity on the ways the proposed project will influence the communities decide on use the land in a sustainable fashion regardless of the purpose (fuel, fodder for example).
- d) Clearly identify what the "appropriate measures" regarding interim legal measures would be and the details of their content.
- e) Note the carbon pools clearly in the calculations provided by the CEO endorsement. To clarify, the realistic assumption was related to the success of the project with respect to protecting the entire carbon stock (100% of 15-19tc/ha or some proportion of it?). Please consider using such assumptions in the CEO Endorsement Request.
- f) At CEO endorsement, include a comprehensive risk analysis;
- g) Detail the implementation arrangements and the role of local communities, including traditional authorities.
- h) Confirm the cofinancing.
- i) Include a M&E plan.
- j) Ensure there is no reputation risks for the GEF and its partners in this operations potentially involving the private sector on sensitive issues (mining, logging and wood products business, etc).

Please check the recent history of these companies/partners in the country or the sector.

Responses

- a) A description of what other partners are doing in Katanga to address drivers of miombo forest loss is described in FAO project document section 1.2a) pages 13 to 16.
- b) Set-up in the project area:
- Village land which includes communal forests and agricultural land with individual farmers fields.
 Communities ownership of the land is currently under customary tenure system. The customary land tenure is not secure as described in the project document section
- 1.1 . The project will provide technical expertise to support the government to develop administrative regulations that allow forest concessions to be awarded to communities under Law No. 11/2002. These regulations will be applied/tested by the project, by accompanying each pilot community through the administrative process to obtain legal rights.
- Participatory zoning (not zoning plans) is an integral part of preparation of forest management plans. Within the community forests, there 3 main zones intact miombo, secondary forests and severely degraded forests. With two main objectives (sustainable use to conserve the forests, and maintaining and enhancing livelihood benefits to the communities), these 3 zones will be placed under different forest management regimes/practices. The role of the project is to provide for technical assistance through training of community support institutions, to accompany communities through the zoning process, and the preparation and implementation of simple forest management plans.
- c) The success and sustainability of project results will depend on benefits delivered to communities vs the current situation. These benefits or incentives, that will influence communities to adopt sustainable practices, are

	described in section B.2 above.
	d)Please see a detailed description of component 2, under section 2 in the project document. e) carbon calculations including assumptions in appendix 5 f) risk analysis in section 3.2 g) implementation arrangements in section 4.2 h) cofinancing letters are attached i) M&E plan described above in section C J) No logging and mining companies involved in the project.
STAP Review	
1. The proposal identifies carbon sequestration as the global environmental benefit the project will seek to deliver. However, this activity is not described clearly in the component section, or in the project framework. STAP suggests defining further the activities on carbon sequestration through sustainable forest management/sustainable land management. This information could be included under component 1, and its expected outputs/outcomes detailed in the project framework.	Please see a description of component 1, pages 25-29 in the FAO project document.
2. As mentioned above, STAP appreciates the details in the project overview (section A â€" barriers, causes, drivers of land/forest degradation). However, STAP encourages the project developers to enhance this section further by citing published, or rigorous un-published literature to support this section. For example, the proposal states that overall deforestation rates for the DRC remain relatively low; and, that the causes contribute to "degraded forests, reduced forest ecosystem services and large net emissions to the atmosphere." It would be useful to provide figures, or references, to support further this section.	This has been done, please see section 1.1 General context in the FAO project document.
3. STAP appreciates FAO's note that precise calculations on carbon stock changes will be done during the development of the proposal. In addition to these figures, STAP recommends specifying in the full proposal the methodology that will be used to estimate and monitor the carbon stock changes. Two potential methodologies are UNEP/GEF's Carbon Benefits Project and FAO's EX-ACT: http://www.unep.org/ClimateChange/carbon-benefits/cbp_pim/http://www.fao.org/tc/exact/en/	Methodology used is described in Appendix 5 in the FAO project document.
4. In this regard, STAP recommends strengthening the	Done. Results framework Appendix 1, section 4.6

baseline by defining the impact indicators, providing data, and describing the methodology that will be used to estimate and monitor the global environmental benefits. This information is important for establishing the incremental reasoning, and ultimately measuring/monitoring global environmental benefits.

Monitoring and Evaluation plan, and Appendix 5 Quantifying and monitoring carbon benefits.

5. Additionally, FAO may wish to use the following study conducted in miombo forests in Zambia to further inform its activities on sustainable forest management and carbon stock changes. The paper's reference list also may prove useful to the project developers in informing further the design of the proposal: Chidumayo, E.N. "Forest degradation and recovery in a miombo woodland landscape in Zambia: 22 years of observations on permanent sample plots". Forest ecology and Management 291, 154-161. 2013.

Thank you. In addition we used this study: Kalaba F.K., C. Quinn, A.J. Dougill, R. Vinya. 2013 Floristic composition, species diversity and carbon storage in charcoal and agriculture fallows and management implications in Miombo woodlands of Zambia. Forest Ecology and Management 304: 99–109.

GEF Council Comments

Comments by United States

The United States believes that the goal of this project is beneficial and that community based approaches can play a significant role in addressing the barriers to sustainably managed forests. Prior to CEO endorsement, we recommend the proposal address expectations for local managers, including whether or not the sustainable management of forests will be mandated.

Additionally, the final proposal should provide greater detail on the community funds that manage the revenues from the sale of wood and non-wood forest products. Oversight and transparency of these funds is critical for success. Therefore, clear guidelines on the role of the fund should be developed, including what revenues will be transferred to the fund, how the funds will be distributed, how information on the funds will be disseminated, how management is designed, and the methods for ensuring proper accountability of the funds.

Lessons learned indicate that community-based forest management approaches are most successful when they are voluntary and not imposed or mandated. This is part of the criteria to select project communities. A number of consultations with communities and local chiefs were conducted during project preparation to explain the goal of the project, potential benefits to communities and the environment. The empowerment of communities for the control of access and use to the marketing of forest products from community forests will be conditional upon their commitment to prevent deforestation and to the sustainable use of the forest.

There is full agreement on the high importance of oversight and transparency on the forest management funds. Key aspects of funds management that have been included in the design are the following:

- Funds will be collected and managed by the community managers. Government will have no direct control over the funds;
- The development of community capacities for good governance is considered to be the most important of all the different institutional capacities. A large part of project funding is dedicated to capacity development, especially for good governance;
- Annual audits of community funds will be standard practice;
- All forest users should contribute in cash or in kind to forest management costs;

Forest management labor needs and expertise will be paid out of the management funds. The use of voluntary labor will be kept to a minimum.

Comments by JICA

JICA is conducting forest resources assessment in Province du Bandundu for the purpose of establishing MRV system for REDD. Although there is no overlap with expected GEF project, information sharing is highly appreciated. Because Community Forest Management plays central role in DRC and JICA is planning to include such component into future project of JICA.

Comment taken into account. There was much discussion about methodologies used by JICA during project preparation. Collaboration with JICA as a technical partner will indeed be important.

Comments by Germany

Germany approves the following PIF in the work program but asks that the following comments are taken into account:

- The focus of the project is on Miombo woods, a highly fragile ecosystem that needs to be managed very carefully in order to maintain the provisioning services. Germany approves the following PIF in the work program but requests that the following comments are taken into account:
- The current approach proposed by the project does not build upon existing governance and management structures on the local level but rather proposes to create new structures.
 Germany strongly suggests reviewing this approach and basing the proposed forest management on existing structures. There are decentralized structures which are linked to the top or bottom.
- Since Miombo woods are highly fragile a transparent and long-term engagement has to be ensured. The current proposal does not follow such a long-term engagement.
- Communication with other projects is highly suggested to benefit from their expertise and their lessons learnt.

The only local structures that are found in all communities are hereditary traditional authorities (chiefs). The project recognizes that one needs to work with the traditional authorities. One of the two main chiefs – Chief Kaponda has played a pioneering role in forest conservation and and has been very supportive of the Miombo Project.

We strongly agree that long-term engagement is critical to the success of the development of participatory NR management systems and the following have been taken into consideration:

- Emphasis on self-financing
- Emphasis on capacity building of communities and community support institutions
- Development of a provincial strategy for widespread replication of the management systems developed

We have established communications with other projects and partners working in Katanga including GIZ, GRET (Groupe de Recherches et d'Echanges Technologiques) and others.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS⁵

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

PPG GRANT APPROVED AT PIF: USD			
Project Preparation Activities Implemented	GEF/LDCF/SCCF/NPIF Amount (\$)		
	Budgeted Amount	Amount Spent to date	Amount Committed
Activity 1: inception workshop and training of national consultants	24,034	20,954.06	
Activity 2: Spatial analysis of charcoal supply zone	10,343	14,712.33	
Activity 3: Review of lessons learned and best practices	8,680	15,597.20	
Activity 4: Sociological, market chain and stakeholder analysis	7,753	6,744.35	
Activity 5: Analysis of legal framework	5,772	9,024.95	
Activity 6: Consultations and drafting of the project document	73,418	28,924.95	
Activity 7: Project completion workshop and finalization of the project document	20,000	40,501.65	4,218.90
Total	150,000	136,459.49	4,218.90

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

NA

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⁵ If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent funds, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for activities.



FAO/GLOBAL ENVIRONMENT FACILITY PROJECT DOCUMENT



PROJECT TITLE: COMMUNITY-BASED MIOMBO FOREST MANAGEMENT IN SOUTH EAST KATANGA **PROJECT SYMBOL:** GCP/DRC/046/GFF

RECIPIENT COUNTRY: DEMOCRATIC REPUBLIC OF CONGO

RESOURCE PARTNER: GLOBAL ENVIRONMENT FACILITY

FAO PROJECT ID: 618733 GEF PROJECT ID: 5547

EXECUTING PARTNER(S): MINISTRY OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

EXPECTED EOD (STARTING DATE): 1 JANUARY 2016

EXPECTED NTE (END DATE): 31 DECEMBER 2020

CONTRIBUTION TO Strategic Objective 2: Increase and improve provision of goods and services

FAO'S from agriculture, forestry and fisheries in a sustainable manner

STRATEGIC FRAMEWORK

GEF FOCAL AREA: MULTI-FOCAL AREAS

GEF STRATEGIC OBJECTIVES: CCM-5, LD-2, SFM/REDD-1, SFM/REDD-2

ENVIRONMENTAL IMPACT ASSESSMENT CATEGORY: C

FINANCING PLAN:	
GEF ALLOCATION (USD):	4,533,333
Co-financing (USD):	, ,
Ministry of Environment and Sustainable Development (MEDD)	5,600,000
University of Lubumbashi	1,772,000
Observatoire Satellital des Forêts d'Afrique Centrale	1,200,000
PREMICONGO	607,000
ZEBREAU	763,670
Bureau Diocésain de développement (BDD)	1,500,000
APRON APAKAT	398,000
GIZ	1,350,000
FAO	1,300,924
Subtotal Co-financing:	14,491,594
Total Budget:	19,024,927

EXECUTIVE SUMMARY

Forests of the Democratic Republic of Congo (DRC) cover 60 percent of the country's territory and act as one of the largest carbon sinks in the world. With more than 150 million hectares of natural forests, DRC has the sixth largest forest area in the world. It represents about a quarter of all forests in Africa and 56 percent of the forests of the Congo Basin. Forest types in DRC include: i) the moist evergreen and semi-deciduous forests that cover 41 percent of the territory ii) the dry forests of southeast or "miombo" occupying 11 percent of the territory and iii) swamp forests (4 percent). The focus of the project will be on miombo forests found only in Katanga Province.

The miombo ecoregion in DRC consists of a mix of a population of trees (dominantly *Brachystegia. sp., Julbernandia sp.* and *Pterocarpus sp.*) between 15 to 20 meters in height interspersed with grasslands, rivers, lakes and wetlands. The region is home to the Lualaba River, the main headstream of the Congo River, Lake Upemba, and Lufoi Waterfall, one of the largest waterfalls in central Africa. Some 190 species of animals are found in this region, among which are elephants, a small population of plains zebra in Upemba and Kundelungu National Parks, and endemic Upemba lechwe. Miombo forests contribute to climate change mitigation as well. It is estimated that the carbon stock held in 1 million hectares of miombo forests in the Katanga charcoal supply zone is 39 million tons C ha⁻¹.

Miombo forests are also very important to the economy and livelihoods of people within the charcoal supply zone of Lubumbashi. Timber and non-timber forest products (NTPF) are a major source of revenue for local communities. NTFP include a diverse array of products such as fruits, honey, traditional medicines, mushrooms, edible caterpillars and materials for basket weaving.

The forests and the ecosystem services they provide are rapidly declining. Before the foundation of Lubumbashi in 1910, southeast Katanga was mostly covered with miombo forests. Currently, over 80 percent of these forests have disappeared. The forest area left corresponds to an area of approximately 1 million hectares, with an estimated deforestation rate of 1 percent per year . There are two main direct threats leading to the degradation of the miombo in Katanga. These include highly unsustainable rate of overcutting of miombo forests for charcoal and wood for urban markets and clearing for conversion to agriculture.

The Government of DRC with support from partners, has taken important steps to improve forest management and address threats to forests in the country. In the Forest Code of 2002, an important place is given to community forestry. To implement the Forest Code, the Government has developed a national programme for community forestry. However, there are a number of barriers to the successful implementation of the programme, particularly in the proposed project area. These include: i) lack of previous experience in miombo forest management for the sustainable production of woodfuels; ii) weak technical capacities of community support institutions and of communities; and iii) gaps in the legal framework including insufficient administrative regulations for the empowerment of communities for forest management. The project seeks to address these barriers.

The objectives of the project are: to promote the sustainable management and restoration of miombo forest ecosystems in order to reduce carbon emissions from deforestation and forest degradation; and to improve the sustainability of livelihoods of local communities through the marketing of woodfuels and non-timbre forest products harvested from sustainably managed forests.

The main institutional partner in this project is the Ministry of Environment and Sustainable Development (MEDD). MEDD will be responsible for the overall coordination and implementation of project activities, and collaboration with relevant government ministries (Agriculture, Land and others), local NGOs, related programmes including the REDD+ programme and GEF-funded projects.

FAO, as the GEF Agency, will be responsible for the supervision and technical guidance during the implementation of the project. The project has a duration of five years and a budget of USD 19 024 927 of which USD 4 533 333 is GEF financing and USD 14 491 594 co-financing.

TABLE OF CONTENTS

EXECU	TIVE SUMMARY	2
	OF CONTENTS	
	ARY OF ACRONYMS	
	DN 1: RELEVANCE	
1.1	GENERAL CONTEXT	
1.2	RATIONALE	
1.3	FAO's COMPARATIVE ADVANTAGE	
1.4	PARTICIPANTS AND OTHER STAKEHOLDERS	
1.5	LESSONS LEARNED FROM PAST AND RELATED WORK, INCLUDING EVALUATIONS	22
1.6	LINKS TO NATIONAL DEVELOPMENT GOALS, STRATEGIES, PLANS, POLICY AND LEGISL	
and	FAO's STRATEGIC OBJECTIVES	22
SECTIO	ON 2: PROJECT FRAMEWORK	
2.1	PROJECT STRATEGY	
2.2	PROJECT OBJECTIVES	25
2.3	PROJECT COMPONENTS	25
2.4	GLOBAL ENVIRONMENTAL BENEFITS	32
2.5	COST EFFECTIVENESS	32
2.6	INNOVATIVENESS	33
SECTIO	ON 3: FEASIBILITY	34
3.1	ENVIRONMENTAL IMPACT ASSESSMENT	34
3.2	RISK MANAGEMENT	34
SECTIO	ON 4: IMPLEMENTATION AND MANAGEMENT ARRANGEMENTS	36
4.1	INSTITUTIONAL ARRANGEMENTS	36
4.2	IMPLEMENTATION ARRANGEMENTS	36
4.3	FINANCIAL PLANNING AND MANAGEMENT	39
4.4	FINANCIAL MANAGEMENT AND REPORTING ON GEF RESOURCES	40
4.5	PROCUREMENT	4
4.6	MONITORING, EVALUATION AND REPORTING	
4.7	PROVISION FOR EVALUATIONS	
4.8	COMMUNICATION AND VISIBILITY	
	ON 5: SUSTAINABILITY OF RESULTS	
5.1	SOCIAL SUSTAINABILITY AND GENDER MAINSTREAMING	
5.2	ENVIRONMENTAL SUSTAINABILITY	
5.3	FINANCIAL AND ECONOMIC SUSTAINABILITY	
5.4	SUSTAINABILITY OF CAPACITIES DEVELOPED	
5.5	REPLICABILITY AND SCALING UP	
	IDICES	
	IDIX 1: RESULTS MATRIX	
	IDIX 2: PROVISIONAL WORK PLAN	
	IDIX 3: RESULTS BUDGET	
	IDIX 4: DRAFT TERMS OF REFERENCE OF KEY PERSONNEL	
	IDIX 5: QUANTIFYING CARBON BENEFITS	
APPEN	IDIX 6: ENVIRONMENTAL AND SOCIAL SCREENING	76

GLOSSARY OF ACRONYMS

SLOSSARY OF	
AFODEK	Agroforêts pour le Développement de Kipushi
AU .	African Union
AWP/B	Annual Work Plan and Budget
BDD	Bureau Diocésain de développement
BFP	Biodiversity and Forest Program of GIZ
BFC	Bureau de Foresterie Communautaire
ВН	Budget Holder
CAF	Chantiers d'Aménagement Forestier
CBFM	Community-Based Forest Management
CBFP	Congo Basin Forest Partnership
CEEAC	Economic Community of Central African States
CEO	Chief Executing Officer (GEF)
COMESA	Common Market for Eastern and Southern Africa
COMIFAC	Central African Forest Commission
СРЕ	Coordination Provincial de l'Environnement
СРР	Centre de Promotion et Paysannat
DFC	Division de Foresterie Communautaire
DGF	Directorate of Forest Management
DRC	The Democratic Republic of Congo
DSCRP	Strategy Document for Growth and Poverty Reduction
EP	Executing Partner
FE	Final Evaluation
FAO	Food and Agriculture Organization of the United Nations
FORCOM	Projet de Développement et de Mise en Oeuvre de la Foresterie Communautaire
FPMIS	Field Project Management Information System
GCP	Government Cooperative Programme
GEB	Global Environmental Benefits
GEF	Global Environment Facility
GEFSEC	GEF Secretariat
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbei
GRET	Groupe de Recherches et d'Echanges Technologiques
GTCR	Groupe Thématique Climat REDD
ICCN	Institut Congolais pour la Conservation de la Nature
IPAPEL	Inspection Provinciale d'Agriculture Pêche et Elevage
LoA	Letters of Agreement
LTO	Lead Technical Officer
LTU	Lead Technical Unit
LULUCF	Land Use, Land-Use Change and Forestry
MEDD	Ministry of Environment and Sustainable Development
M&E	Monitoring and Evaluation
NAP	National Action Plan
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NFMS	National Forest Monitoring System
NGO	Non-Governmental Organization
NTFP	Non-Timber Forest Product
PFM	Participatory Forest Management
PIF	Project Identification Form (GEF)
PIR	Project Implementation Review
PMU	Project Management Unit
PPG	Project Preparation Grant (GEF)
PPR	Project Progress Report
PSC	Project Steering Committee
PTF	Project Task Force
PNEFEB	National Programme for Environment, Forests, Water and Biodiversity
PNFoCo	National Forest Management and Nature Conservation Programme
PREMI CONGO	Protection des Ecorégions de Miombo au Congo
PRODOC	Project Document
PSC	Project Steering Committee
PY	Project Year
RBM	Results-based-management
REDD	Reduced Emissions from Deforestation and Forest Degradation
RIFFEAC	Réseau des institutions de Formation Forestière et Environnementale en Afrique Central
RRN	Réseau Ressources Naturelles
SADC	Southern African Development Community
SFM	Sustainable Forest Management
SNR	National Reforestation Service (Service National de Reboisement
SPIAF	Permanent Service for Inventories and Forest Management Planning (Service Permanent d'Inventaire et d'Aménagement Forestiers
STAP	Scientific and Technical Advisory Panel
TCI	Investment Centre Division (FAO)
TOR	Terms of Reference
UNEF	Union des Ecologistes Forestiers
UNFCCC	UN Framework Convention on Climate Change
UNILU	Université de Lubumbashi
USD	United States Dollar

SECTION 1: RELEVANCE 1

1.1 GENERAL CONTEXT

a) General project context

The Democratic Republic of Congo (DRC) is a vast country of 2,345,000 square kilometres located in Central Africa. The country's population is estimated at 77 million¹. DRC has emerged, since 2002, from a long period of conflict and instability whose origins date back to the mid-1970s. It remains a fragile post-conflict country characterised by a huge need for reconstruction and economic growth. In 2013, DRC had the second lowest human development index out of 187 countries².

Forests of the DRC cover 60 percent of the country's territory and act as one of the largest carbon sinks in the world. With more than 150 million hectares of natural forests, DRC has the sixth largest forest area in the world. It represents about a quarter of all forests in Africa and 56 percent of the forests of the Congo Basin. Forest types in DRC include: i) the moist evergreen and semi-deciduous forests that cover 41 percent of the territory ii) the dry forests of southeast or "miombo" occupying 11 percent of the territory and iii) swamp forests (4 percent). These different forest ecosystems provide a variety of habitats and are home to a great diversity of biological resources, with DRC regarded as one of the most biodiverse countries in the world.

No reliable estimate of the rate of deforestation at the national level is available. Observations on some sites have estimated the annual deforestation rate at 0.4 percent. Despite the relatively low deforestation rate, the absolute area lost each year is the seventh highest annual forest area loss globally³. The situation is more alarming around large cities and in densely populated regions. The main causes of this deforestation include logging, agricultural expansion and wood extraction.

The economic value of forests is much greater than current estimates of the contribution of the forest sector in the national economy where only timber is taken into account. Indeed, in rural areas where 70 percent of the population lives, people depend on forests for energy, food, housing and income. This dependence and pressure on forest resources have increased considerably over the past two decades following the collapse of the economic fabric and armed conflict.

b) Miombo Forests in Katanga Province

The miombo is the largest forest type in Africa covering between 2.7 and 3.6 million square kilometers or at least 12 percent of the continent – see Figure 1. Rainfall varies between 700 to 1200mm. It is the dominant forest type in Zambia, Malawi, Mozambique, Zimbabwe, Angola, and Tanzania and is also found in DRC, Namibia and South Africa. The miombo woodlands are considered to be a center of endemism with 4,590 endemic plant species (of which 300 are woody species), 35 endemic mammals, 51 endemic bird spp. and 52 spp. of reptile⁴.

In DRC, miombo is found only in Katanga Province where it covers the districts of Haut-Katanga and Kolwezi and partially the districts of Tanganyika and Lualaba. Katanga province covers approximately 496,877 km². The miombo forests in Katanga are at the high end of the rainfall range for miombo with 1200mm/yr. They are classified as "wet miombo" in Figure 1 (dark green shade). A major element of southeast Katanga climate is the alternation of a wet season and a dry season. The duration of the dry season varies from 5 to 8 months, from late March to mid-November. Soils are generally leached and poor in nutrients due to low organic matter and nitrogen. These nutrient poor soils have a low pH and range from sandy loam to sandy

¹ World Fact Book, Central Intelligence Agency found at https://www.cia.gov/library/publications/the-world- factbook/geos/cg.html

² http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/COD.pdf

³ FAO 2011a. State of the World's Forests 2011.

⁴ Biodiversity Foundation for Africa, 2011. Miombo Ecoregion Vision Report.

clay. A combination of the climate and poor soils, has a major influence on the type of vegetation and seasonal vegetation changes.

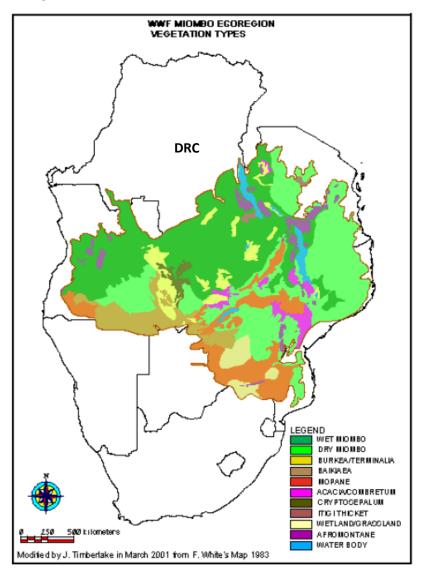


Figure 1. Geographic location of miombo forest types in the Zambezian Eco-Region (WWF-SARPO, 2001).

The proposed project will focus on the miombo forests in southeast Katanga Province. Most of DRC's past investments in forest management have been in the humid forests even though the miombo forests also provide important ecosystem services that should be maintained.

Global Significance. The miombo ecoregion in DRC consists of a mix of a population of trees (dominantly *Brachystegia. sp., Julbernandia sp.* and *Pterocarpus sp.*) between 15 to 20 meters in height interspersed with grasslands, rivers, lakes and wetlands. The region is home to the Lualaba River (and several tributaries), the main headstream of the Congo River, Lake Upemba, and Lufoi Waterfall, one of the largest waterfalls in central Africa. Some 190 species of animals are found in this region, among which are elephants around Lake Upemba, a small population of plains zebra in Upemba and Kundelungu National Parks, and endemic Upemba lechwe. The black rhino, formerly present in Katanga is now extinct in DRC. The lakes and rivers are reported to support over 180 species of fish including 28 endemics, plus a rich

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⁵ WCS-DRC. 2008. Large mammal survey, Upemba and Kundelungu National Parks.

herpetofauna with six endemic frogs. ⁶ At least 16 endemic birds are found in this region, with two weaver birds restricted to the Lufira basin (Ploceus ruweti) and Upemba (Ploceus upembae)⁷.

Miombo forests are also important for their potential contribution to climate change mitigation. A recent study⁸ of the miombo woodlands of Copperbelt Province of Zambia, adjacent to Southeast Katanga, found that undisturbed miombo stored about 39 tons C ha⁻¹ above ground. It can therefore be estimated that the carbon stock held in the 1 million hectares of miombo in the charcoal supply zone is 39 million tons C ha⁻¹.

Socio-economic context and benefits derived from miombo forests. The economy of Katanga Province, whose population is about 10 million, is dominated by mining. The southern part of the province is one of the most mineralized zones in the world, with vast reserves of copper and cobalt in the copperbelt, which stretches along the borders with Zambia and Angola. The copperbelt contains 34 percent of the world's cobalt reserves and 10 percent of the world's copper reserves. The provincial capital, Lubumbashi is the second largest city in DRC and its population has grown from 560,000 in 1984 to 1.2 and 1.5 million in 2006 and 2009 respectively – it is about 2 million today. Despite the rich mining industry, poverty in the province is very high, with the poverty rate estimated at 69 percent.

Agriculture has long been the main economic activity in the rural areas, particularly in the southeastern part of the province where the population has not benefited from the abundant mineral resources. But, this has changed. Miombo forests have become extremely important to villagers in the charcoal supply zone around Lubumbashi. Driven by high demand – about 95 percent of the population in Lubumbashi cooks with charcoal particularly - charcoal making has become the main source of income, replacing agriculture, as it is much more profitable than cropping. Charcoal can be made from one hectare on a 15 to 21 day cycle and will earn \$256 to \$480\frac{10}{2}. Producing a crop of maize on one hectare takes 6 to 7 months and will sell for \$230. About 75 percent of farmers make charcoal but many of them have abandoned farming altogether to become full time professional charcoal makers. Some farmers subsidize their cropping with revenues earned from charcoal to purchase fertilizer and other inputs. In addition to its use for cooking, charcoal is used in brick making.

Non-timber miombo forest products, including mushrooms and caterpillars, are also important as sources of food and income for the local population. The importance of NTPFs, from income point of view, varies from place to place within the forest zone. For instance, mushrooms are more profitable (43 percent of additional income) on the Lubumbashi-Likasi route. However, due to miombo loss and degradation, NTPFs have generally declined. Some wild fruits like Anisophyllea laurina, Uapaca kirkii afromum are now extinct or near extinction. Table 1 below demonstrates the socio-economic importance of miombo forest products in rural villages around Lubumbashi.

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⁶ USAID, 2010. Democratic Republic of Congo: Biodiversity and Tropical Forestry Assessment http://pdf.usaid.gov/pdf docs/Pnads946.pdf

⁷ DRC Government, 2008. Inventory of wetlands in the DRC. http://archive.ramsar.org/pdf/wurc/wurc dr-congo_inventaire2008.pdf

⁸ Kalaba et al. 2013. Floristic composition, species diversity and carbon storage in charcoal and agriculture fallows and management implications in Miombo woodlands of Zambia.

⁹ John Katanga. 2014. Project preparation study.

¹⁰ Jule Nkulu. 2014. Project preparation study.

Table 1. Socio-economic contribution of marketable forest products to households

Forest	Contribution in % to annual income for	Estimated occupation time in	Ratio
product	households ¹¹	days	income(%)
Firewood	17	15	1.13
Lumber	14	20	0.70
Charcoal	41	20	2.05
Mushrooms	15	45	0.33
Caterpillars	6	60	0.10
Wild fruits	5	45	0.11
Game	2	nd	nd

c) Status of miombo, threats and drivers

Before the foundation of Lubumbashi in 1910, southeast Katanga was mostly covered with miombo forests mixed with residual fragments of the dense dry forest (muhulu) and gallery forests. Currently, over 80 percent of these forests have disappeared. The forest area left corresponds to an area of approximately 10,000 km² (1 million hectares). Miombo forests in Katanga Province are highly fragmented nearly everywhere. The spatial analysis of land use and land/forest cover (Figure 2) conducted during project preparation confirmed that forests are rapidly disappearing within a radius of over 100 km from Lubumbashi. It clearly shows that miombo forests have become more and more degraded as one approaches Lubumbashi. One goes from a mix of intact forest and secondary forest to grass and shrub savannah.

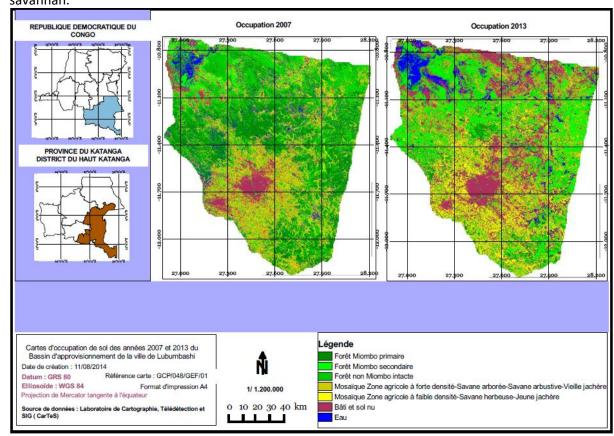


Figure 2. Lubumbashi charcoal supply zone – land cover changes from the analysis of Landsat ETM+ images of May 2007 and September 2013.

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¹¹ All figures relate to rural households

Lubumbashi is the large red patch in the lower left. Red shows urban areas and bare soil. The 30-40 km band around Lubumbashi is dominated primarily by a mosaic of agriculture and grass savannahs that are the result of young fallows and intensive cutting for woodfuel (area shown in yellow). Secondary miombo is the dominant land cover farther out. No field testing of the accuracy of this classification was done, but the general trends of miombo degradation as a function of distance from Lubumbashi are very clear. In agreement, the visual perception of experienced observers of the Lubumbashi supply zone is one of very rapid forest loss.

Non-timber forest products (NTFPs) are also down sharply in the miombo forests. In some cases there is extinction or near extinction of wild fruits like Anisophyllea laurina, Uapaca kirkii afromum due to the combined effect of high exploitation of miombo for woodfuels and clearing for agriculture. Edible caterpillars have been reduced and are now only found in areas where the forests are still more or less intact. This is because edible caterpillars feed on tree species that are also excellent for making charcoal. Women, who are the main collectors of edible caterpillars, currently have little or no say in their use for woodfuels.

With regard to carbon emissions, it is estimated that the deforestation rate of the miombo is about 1 percent per year¹². It has to be noted that accurate deforestation rates for miombo woodlands are difficult to come by. Dryland forests are notoriously difficult to classify using satellite imagery and are frequently characterized by a continuum between intact, degraded forest and fallow and secondary forests of all ages. Applying the 1 percent/yr deforestation rate to the Lubumbashi supply zone gives us about 10,000 hectares lost each year leading to annual emissions of 390,000 tons C/year. Deforestation rates in the supply zone are probably considerably higher than this because of the overcutting for charcoal.

There are two main direct threats leading to the degradation of the miombo woodlands in Katanga. These include unsustainable harvest of miombo for woodfuels mainly for urban markets and clearing for conversion to agriculture.

Unsustainable harvest of miombo for fuelwood. In the 1980s, Lubumbashi's charcoal supply came from miombo forests within 30 km of the city. At that time agriculture was the main economic activity and charcoal making from the clearing of miombo woodlands for cropping was a secondary activity that provided farmers with additional revenue. Now, 30 years later, there is no intact miombo or secondary miombo forests in the first 30 km around the city and almost no charcoal is produced in this zone. The number of stems per hectare of stump sprouts of miombo species is very high, but they never get beyond the size of a bush before being cut back to ground level. The supply zone for charcoal is now found in an area that runs from 35 to 115 km from Lubumbashi, stretching out the farthest wherever there are all-weather bituminous roads. Charcoal making is now the major economic activity and agriculture has become secondary and generates much less revenue.

The current method of harvesting miombo for woodfuel is unsustainable because of two main factors – the way the stands are cut, and, especially, the way the land is mismanaged following the harvest. When the miombo is clearcut, full sunlight reaches the ground and the growth of grasses increases greatly in height and in biomass, competing with the stump sprouts and natural seedlings. Even so, the woody regeneration would probably close in in a few years and the canopy would once again suppress the growth of the grasses if traditional early burning practices were maintained. But the mid to late dry season fires that now occur routinely kill back much of the natural regeneration, maintaining an open canopy and, with it, the lush growth of grasses that continues the cycle of severe fires that prevent the miombo from re-establishing itself.

The unsustainable harvest is driven by a number of factors including: (i) the escalating demand for charcoal in Lubumbashi. In a recent study conducted in 2014 by GIZ and the University of Lubumbashi, annual needs of charcoal in the area of Lubumbashi, was estimated at $350,000 \pm 27,000$ tons of charcoal. In addition to

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¹² Derived from the FAO deforestation rates for six miombo countries, 2007.

its use for cooking, 45 percent of this charcoal is used in brick making; (ii) poverty and shortage of other income-generating activities; (iii) charcoal-making is much more lucrative than other alternatives; (iv) the low levels of investment and expertise needed to make charcoal; and (iv) the location and quality of road access. The recent opening and improvement of roads to the northeast of Lubumbashi have greatly accelerated forest loss.

Another factor contributing to the unsustainable harvest is the inefficient way of making charcoal. Charcoal makers in Katanga use the notoriously inefficient traditional earthen kiln, with energy efficiency of around 8-12 per cent. This means that 8 to 12 kg wood is needed to make 1 kg of charcoal.

Clearing for agriculture. Traditionally, agriculture in the miombo zone was sustained through the use of very long fallow periods that allowed for the restoration of soil fertility. Miombo forest regions are generally characterized as having some of the poorest soils on the continent and those in southeast Katanga appear to be no exception. Low inherent fertility of miombo soils combined with modern-day shortened fallows and insufficient nutrient replacement result in falling yields requiring more and more intact forest to be cleared. Wherever farmers have access to intact miombo forest land, clearing miombo for new cropland is generally their preferred option — cutting and uprooting trees and burning the remaining vegetation. Such miombo forest land is readily available in much of the Lubumbashi charcoal supply zone.

Table 2. Summary of the main threats and drivers of miombo deforestation and degradation in southeast Katanga

Direct threats	Root causes/drivers
Highly unsustainable rate of overcutting of miombo forests for charcoal and fuelwood for urban markets	 Rapidly growing demand for charcoal for cooking and for brick-making due to demographic growth and lack of alternative energy sources. The cost of cooking with gas or electricity is very high. Poverty and shortage of other income-generating activities. Charcoal-making is much more lucrative than the other primary economic alternative – rainfed cropping. Very low levels of investment needed to make charcoal and relatively low levels of expertise needed;
Clearing for agriculture	 Unsustainable agriculture: Low inherent fertility of miombo soils combined with modern-day shortened fallows and insufficient nutrient replacement result in falling yields requiring more and more intact forest to be cleared Returns for charcoal making subsidize costs of clearing forests for agriculture.

d) Legal, policy and institutional context

Legal and policy context. All natural forests in DRC, including Katanga's miombo forests, belong to the State and are under the jurisdiction of the Ministry of Environment and Sustainable Development (MEDD).

Before 2002, forest management in the DRC was governed by colonial decree of 11 April 1949. Having become obsolete, this text was replaced by Law No. 11/2002 of 29 August 2002, the Forest Code which reflects a new forest policy developed during the 1990s.

The Forest Code aims to "foster rational and sustainable management of forest resources to increase their contribution to the economic, social and cultural development of today's generations, while preserving forest ecosystems and forest biodiversity for future generations". In particular, the Code aims to:

- promote the principles of sustainable use and conservation of biodiversity;
- promote the transparent management of forest resources through the establishment of a tendering system for granting forest concessions;
- set-up mechanisms, institutions and tools for sustainable management of forests (forest management plans, forest register, the National Advisory Committee of forests, etc.);

• facilitate greater involvement of local communities in sustainable forest management through various participatory and consultative mechanisms and especially through the establishment of "local community forests". This has opened a new dimension in which an important place is given to community forestry.

Since the Forest Code only sets general principles, a number of regulations or ministerial decrees to implement the code have had to be issued. These deal with methods for the preparation of forest management plans, law enforcement, reforestation, forest surveys and protected forest species.

With regard to community forest management, DRC took a major step forward in August 2014 with the issuance of a ministerial decret (Décret n°14/018 of 02 August 2014) by the Prime Minister that allows the Ministry of Environment and Sustainable Development (MEDD) to award communities 25-year renewable community forest concessions. However, MEDD and the provincial government still need to adopt additional regulations before the new decree can be operational. The DRC government has made a commitment to establish a separate ministerial decree establishing regulations for experimental community forest management in the Lubumbashi charcoal supply zone.

The Government developed in 2003 a national sector plan - the National Forest Management and Nature Conservation Programme (PNFoCo). The programme, which provided a framework for investments by the Government and donors in the forest sector, had as one of its six main components, the development of community forestry. Implementation of PNFoCo has been supported by the World Bank and other donors, including GEF and FAO. The programme was updated (in 2013), to incorporate water resources management and climate change and renamed the National Programme for Environment, Forests, Water and Biodiversity (PNEFEB). An important goal of PNEFEB is the sustainable management of forest resources such that the deforestation rate is reduced from 0.4 to 0.1 percent by 2023. Targets under the community forestry sub-programme include "at least 30 simple forest management plans are validated between local communities and MEDD".

Within this context, the proposed project is timely, as it aims to contribute to PNEFEB's overall goal, and specifically to the community forestry sub-programme targets.

Institutional context. As mentioned, the ministry in charge of forests in DRC is the Ministry of Environment and Sustainable Development (MEDD). Within MEDD there is: the Directorate of Forest Management (Direction de la Gestion Forestière – DGF) responsible for monitoring forest management and harvesting; the Permanent Service for Inventories and Forest Management Planning (Service Permanent d'Inventaire et d'Aménagement Forestiers – SPIAF); the Congolese Institute for the Conservation of Nature (Institut Congolais pour la Conservation de la Nature – ICCN), responsible for the management of protected areas; and the National Reforestation Service (Service National de Reboisement – SNR). In addition, a new division on community forestry has been established within DGF.

The Forest Code gives more authority for forest management to provincial and local authorities and their administration. The primary function of the provinces is to apply national legislation and participate in forest management in keeping with national laws and regulations. Responsibilities for the forest management at the provincial level are divided between the provincial Ministry of Mines, Environment, Youth and Tourism and the Provincial Coordination for Environment (Coordination Provincial de l'Environnement - CPE). The provincial Ministry is responsible for provincial level policies and their administration, and can develop specific provincial regulations in conformity with laws established at the national level.

The CPE is a "decentralized" entity that reports both to the provincial Ministry and to MEDD at the national level. The CPE is the technical arm of the provincial Ministry and has technical function. The provincial Ministry has six forestry staff and the CPE in Lubumbashi has ten, including one community forestry officer. The CPE has the legal mandate for the collection of taxes on woodfuels, but it is actually the provincial Ministry that collects them at present – a situation that needs to be corrected.

The private sector and NGOs are also involved in forest management activities. NGOs are particularly active in the popularization of the Forestry Code, participating in the development of its implementing regulations

and capacity building. Because of the limited capacity of government institutions, NGO support in forest management in DRC is vital.

Most of DRC's past investments in forest management have been in the humid forests. The prioritization of the miombo forests in southeast Katanga Province as a GEF-5 priority for DRC therefore represents an important shift which will contribute significantly to the protection of the miombo forest ecosystems through sustainable use.

Land tenure. Legally all land and natural resources belong to the State. People and entities desiring userights to land can apply for concessions. Although formal law applies to all land in DRC, application of the law relating to concessions is mostly in urban areas and large holdings of productive land in rural areas. In most rural areas, customary law governs. Under the customary law, groups and clans hold land collectively, and traditional leaders allocate use rights to parcels.

In the case of the Katanga Province, the Provincial Coordination for Environment (CPE) has the mandate to control access for harvest and marketing of woodfuel and other products from the miombo forest. In practice, access to the miombo forest is done under the customary land tenure system under the control of traditional authorities. Traditional authorities in the Lubumbashi supply zone consist of a three-tiered hierarchy with the head chief at the top. There are two head chiefs that each control different parts of the Lubumbashi supply zone. Below the head chiefs are group chiefs and then village chiefs at the lowest level. The powers and functions of customary authorities cover mainly communal lands. Access to fallow lands is controlled by families who originally cleared the land.

The land tenure system is therefore characterized by a juxtaposition of rights, with lack of clarity which undermines tenure security. Moreover, Katanga is a mining province and mining concessions make customary land rights fragile. There have been cases of "land grabs" of traditional lands in the province. This insecurity does not encourage communities to invest in sustainable land and forest management practices. This is one of the aspects to be addressed by through the proposed project.

1.2 RATIONALE

a) Baseline programme (past and ongoing projects and programmes) addressing identified threats

1. National Sub-Programme for Community Forestry

Led by the Ministry of Environment and Sustainable Development MEDD, the purpose of this ongoing subprogramme is to establish and strengthen the role of local communities and indigenous peoples in the sustainable management of forests in order to improve their livelihoods, and thus reduce poverty. This is the main programme serving as baseline co-financing for the proposed GEF project.

The programme has been recognized as an important part of efforts to reduce emissions from deforestation and forest degradation (hence strongly linked to DRC's National REDD+ programme). The programme is expected to have the following results over a period of 10 years (2011-2020):

- 1. An area of 2.465 million ha representative of the Congolese forests under sustainable management by local communities and indigenous peoples;
- 2. Communities effectively manage their forests and revenues from their resources, in partnership with decentralized authorities;
- 3. Annual revenues of at least USD 2.5 million for self-development of 50 local communities, including indigenous peoples;
- 4. A professional body with technical capacity to support local communities and indigenous peoples in the implementation of community forestry is established.

There have been several projects contributing to the sub-programme. These include a project funded by Belgium "Projet de développement et de mise en oeuvre de la foresterie communautaire en République Démocratique du Congo" (FORCOM) through FAO, implemented from 2007 to 2012. The FORCOM project has provided an important contribution to the establishment of community forestry in DRC, and is a key foundation for the proposed GEF project. The aim of the project was to assist the government to translate into action the concept of community forestry which was introduced in the 2002 Forest Code. The project

was implemented at national level regarding policy, legal and institutional issues and in four pilot sites at local level. Technical assistance was provided to set up community-based forest management (CBFM) units. In addition to the CBFM units established in the field, the main achievements of the project are as follows:

- national sub-programme for community forestry was designed, as a component of the National Program for the Environment, Forests, Water and Biodiversity (PNEFEB);
- draft procedures for the development of community forestry;
- draft of the Decree issued by the the Prime Minister in August 2014;
- recommendations on institutional development for community forestry. The recommendations led to the establishment of a division in charge of community forestry within DGF.

One of the FORCOM demonstration sites was at Kikonké, within the charcoal supply zone near Lubumbashi. Kikonké had virtually lost all of their miombo forests – they had all been converted to fields and fallows. With the assistance of the FORCOM project and with a strong role played by their traditional leaders, including the Head Chief Kaponda, the community undertook participatory zoning of their 5000 ha of land. They set aside about 3000 hectares for agriculture and 2000 ha for forest restoration through natural regeneration. The secondary forest now has very dense young tree cover with a very high number of woody stems/ha. This has demonstrated the incredible ability of miombo forests to regenerate when pressures are reduced.

Many farmers near Kikonké have spontaneously started protecting miombo regeneration on their fallow lands. The difference in the growth and crown cover along the dirt road leading into Kikonke between 2013 and 2014 is very striking. At least one of the NGOs (La Protection des écorégions de miombo au Congo - PREMICONGO) that worked at Kikonké has replicated the experience at another site in the Lubumbashi supply zone. GIZ, in collaboration with local communities and a mining company, are supporting reforestation of degraded land in Katanga – under their conservation of biodiversity and sustainable forest management programme.

The main gap in the baseline is that the FORCOM demonstration and subsequent pilots have not gone beyond demonstrating that the miombo forests can be restored. There has not been testing and demonstration of sustainable use of the miombo resources – including sustainable harvest practices. Since there is always demand for woodfuel, restoration on its own, without introducing sustainable use, will not lead to lasting results. This is what the proposed project is aiming to introduce.

2. <u>REDD+ Programme</u>

DRC has been actively engaged in the REDD+ process since 2009. The process has been led by the Ministry of Environment and Sustainable Development (MEDD) through the National REDD+ Coordination, with the assistance of the United Nations REDD+ Program (UN-REDD), the Forest Carbon Partnership Facility (FCPF), the Congo Basin Forest Fund, and other partners. A National REDD+ Framework Strategy with seven pillars focussing on three main sectors (forestry, agriculture and energy), and cross-cutting and enabling aspects (demographics, land use planning, land tenure and governance) was approved by the Council of Ministers in 2012. The sectoral pillars seek to address direct drivers of deforestation and provide measurable emission reductions, while the enabling pillars seek to address underlying causes of deforestation and aim at creating an enabling environment for the development of the sectoral pillars.

DRC has secured over USD 100 million from the Forest Carbon Partnership Facility, the Forest Fund for the Congo Basin, the Forest Investment Program and other donors for implementation of programs and projects contributing to various components of the REDD+ readiness. Activities on the ground within these programmes have mainly focused on three deforestation hotspots (Equateur, Bandundu, Orientale and Bas-Congo), addressing issues of biomass energy, agriculture and community forest management. There has not been much forest management investment in the Lubumbashi charcoal supply zone. This is the main reason the proposed project was selected as a GEF-5 priority to complement on the ground

experience informing the development of the National REDD+ strategy and subsequent provincial strategies. A participatory assessment of the REDD+ readiness was conducted recently¹³. Some of the gaps identified include: (i) lack of procedures for the implementation of the decree on local community forests; (ii) information on REDD+ pilot projects is not accessible and REDD+ pilot project experiences are not adequately leveraged; and (iii) limited community MRV. The proposed project is going to contribute to addressing these three gaps – by testing implementing regulations for community forestry, setting up a knowledge management system for consolidating and disseminating lessons learned and best practices from this and other projects, and developing and testing a community MRV system, in line with the national MRV system.

The community MRV system will be established in partnership with OSFAC (Satellite Observatory for the Forests of Central Africa) who is already implementing activities related to capacity building of specialists in government agencies and civil society organizations in monitoring and evaluating changes in forest quality and extent, carbon stocks and emissions.

The current FAO support and OSFAC activities make up the baseline co-financing for the MRV component of the proposed project.

3. Agriculture-related initiatives including agroforestry in Katanga

The African Development Bank funded "Agriculture and rural sector rehabilitation" project in Katanga, Kasai-Oriental and Kasai Occidental Provinces from 2006 to 2013 (USD 35 million). The objective was to increase food production in the three target provinces by building the capacity of production support services, promoting appropriate agriculture technology, and rehabilitating rural infrastructure. The project trained technical services of the Ministry of Agriculture and Rural Development and local operators to promote sustainable agricultural production, processing and conservation practices; trained community groups; supplied improved seeds; and rehabilitated and constructed rural roads, markets and warehouses, and water points.

GRET (French development NGO) with Nature+ and the Centre promotionnel du paysannat (CPP – Farming Promotion Centre) and Bureau Diocésain de développement (BDD) are implementing a project "Agroforestry and Food Security (AFODEK)" in Katanga whose objectives are to: a) improve food security through improved production of maize, peanut and cassava, and; b) contribute to reduced deforestation from charcoal production. The project addresses the problem of low productivity, unsustainable agriculture through an agroforestry approach that will use long-fallow plantations of acacias to both restore soil fertility and produce charcoal and other wood products for sale. The five-year project (2012 – 2017) will establish 750 hectares of improved fallows. So far, more than 120 hectares of acacia have been planted. A training centre is in the process of being built which will enable agroforestry techniques to be disseminated all over the province.

African Minerals is financing a sustainable livelihoods initiative in communities around Katanga mining concession areas. The initiative has components including forest rehabilitation – establishing indigenous tree nurseries for agroforestry and rehabilitation of drilling sites, and for charcoal production; and food security – introducing conservation agriculture techniques, food preservation and storage techniques, and aquaculture.

4. Improved cookstoves

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Adam Smith International has recently (2015) launched improved cookstoves project in Katanga as part of a private sector development programme ÉLAN RDC (~USD 80 million). ÉLAN RDC, working with local producers and investors including HALT Foundation, aims to stimulate the supply and demand of locally-produced efficient cookstoves. Objectives centre around income benefits accruing to households through

¹³ Participatory self-assessment of the REDD+ Readiness Package in the Democratic Republic of the Congo. March, 2015.

savings from reduced charcoal consumption. ÉLAN RDC has planned a massive production and distribution of improved cookstoves to households in Lubumbashi and other towns in Katanga within the next 5 years.

A local NGO Technical Support for Rural and Urban Development (ATDRU-Lubumbashi) is also promoting improved mbalula cookstoves (similar to the Kenyan Jiko stoves), which has shown a significant potential for adoption – because of its performance and acceptability by women in Lubumbashi.

In addition, a number of other NGOs are implementing activities that contribute to the objectives of the proposed project. These include <u>PREMICONGO</u>, one of the key implementing partners for the FAO-supported project at Kikonké. PREMICONGO conducts participatory gender analysis in forestry, participatory mapping of forest sites, multi-resource forest inventory, assessinment of the market value of Non Timber Forest Products and initiation of community forestry activities for preservation, conservation and regeneration of forest lands. PREMICONGO is currently carrying out quantitative and qualitative assessment of mining impacts on deforestation and degradation in Katanga province. This assessment will inform the revision of the legal framework for forest management (baseline co-financing for component 2).

b) Threats and barriers not sufficiently addressed by the baseline programme

A recent evaluation of the National Sub-Programme for Community Forestry in DRC noted that community forestry is a complex and lengthy process that involves the establishment of an appropriate regulatory framework that tackles sensitive issues such as land reform, and that is understood by everyone. There are many challenges at community and state level in DRC that need to be tackled and it will take significant investment on the part of the DRC government and donor support to establish a self-sustaining community forestry program. The following are barriers to sustainable management of the miombo forests in southeast Katanga, which are not sufficiently dealt with by past and ongoing initiatives so far.

Barrier #1 Limited experience in miombo forest management for the sustainable production of woodfuel and for carbon sequestration

Community-based miombo forest restoration techniques have been clearly demonstrated by the FORCOM pilot in Kikonke, and other small-scale pilot projects. But there have been as yet no attempts to develop sustainable forest management systems for the production of woodfuel from the miombo, to reduce carbon emissions from miombo deforestation and degradation. With the growing population in Lubumbashi and Katanga and escalating demand for woodfuel, any SFM for miombo woodlands that does not include the sustainable production of woodfuels will not address the single greatest threat to the miombo forests in the Lubumbashi area. Making charcoal illegal is not a viable option. Any forest management system that does not include sustainable woodfuel production would only result in severe leakage and further degradation.

Barrier #2 Weak capacity for the implementation of sustainable community forest management

A second major barrier is the strong lack of institutional capacities (technical, financial/economic and governance) for the sustainable management of miombo for woodfuel. The concept of community forestry is new in DRC, and understandably for a country that recently emerged from a long period of conflict, state institutions have very weak capacities in terms of staff numbers and technical skills. Although there has been progress in this regard, particularly with the establishment of a division in charge of community forestry, in Katanga Province this division is severely understaffed. Because of this barrier, NGOs have an essential role in supporting communities in local development and resource management.

An initial assessment of capacity building needs of rural populations conducted during project preparation revealed that there is a huge need for capacity building in many areas such as:

- Awareness of environmental and socio-economic importance of miombo forests. Discussions with FORCOM pilot communities and communities in other villages not covered by FORCOM (e.g. Vietnam Village) revealed a vast difference in the awareness and appreciation of the need to conserve miombo forests. FORCOM communities have a high level of awareness. Professional

- charcoal-makers who have created a new village of Vietnam are exploiting intact miombo and have very little awareness of the need to conserve the forest.
- Sustainable harvest and forest regeneration techniques, including participatory fire management techniques;
- Good governance is critical for sustainable community forest management. Community members must feel that costs and benefits are shared equitably. Community managers must be able to enforce new rules governing access and use of resources;
- Business development, management and marketing; etc. Especially important is the capacity to develop value chains for core products like charcoal and firewood in ways that increase returns to community members and managers including improved production techniques, transportation and marketing. Existing enterprises are based on individuals or very small groups who harvest forest products, who may undertake very basic processing and who usually market their products at roadside to those who happen to pass. Each enterprise is so small that they have very little knowledge of market conditions and even less bargaining power. Each individual at roadside is competing with everyone else at roadside and the easiest way to sell their product is to lower their price.

Capacity building efforts will have to include NGOs who have been very active in supporting forest management and community development in Katanga.

Barrier #3 Gaps in the legal and regulatory framework for community forest management

A third barrier is the insufficient legal framework for community forest management. Until very recently, the existing legal framework was geared primarily toward revenue generation and had little or nothing to do with forest management. Since the PIF was approved, a new ministerial decree (Arrêté no14/018) was passed in August 2014 that allows forest concessions to be awarded to communities for all forms of forest use. Additional administrative regulations are still needed before the awarding of community concessions can be made operational. Although the new law should provide a usable legal tool for initial participatory SFM pilot activities, the legal framework will almost certainly need to be revised again after a few years of lessons learned from pilot PFM experiences in order to provide a more optimal framework for upscaling in the future.

Other legal barriers include the following:

- The law requires that all communities with forest concession must pay all taxes on forest products and activities that are required by law, with no exceptions. As taxes are currently collected in an erratic fashion in the project zone, this could lead to community managers being taxed more heavily than adjoining communities harvesting wood from non-managed lands, creating a potentially major disincentive for communities to invest in forest management;
- It is not clear that communities have the right to establish and manage forest management funds themselves. The legislation for the National Forestry Fund (NFF) seems to give the NFF the exclusive prerogative to fund all forest management and reforestation activities and their monitoring and control. This could make it impossible to create community-controlled forest management funds.
- There are two provincial decrees in Katanga Province that are in conflict with national laws. The first reduces the allowable period for cutting of trees in Katanga Province to three months out of the year (clearly not being enforced) and the second bans all forest and bush fires. Fire is part of the ecology of the miombo forests and the systematic use of early controlled burns is expected to be a key forest management tool.

c) Incremental reasoning (added value of the GEF financing)

The project has been designed to address the barriers stated above. The GEF financing will go towards supporting the demonstration of sustainable forest management for woodfuel production that leads to: the reduction of carbon emissions from miombo deforestation and degradation; and improved socio-economic

benefits for communities, within the framework of the National Sub-Programme for Community Forestry. These are elements largely missing in the baseline, particularly in southeast Katanga's miombo supply zone. Technical assistance will be provided to address the enabling environment issues – capacity at the level of communities and community support institutions (Government and NGOs) and gaps in the legal framework.

To address **Barrier #1,** component 1 of the proposed project will build on the Kikonke restoration pilot and work with communities within the present charcoal supply zone for Lubumbashi. Technical assistance will be provided to communities to develop simple forest management plans. The aim will be to demonstrate the following key elements: sustainable harvest systems for the production of charcoal and carbon management; improvement of the fuelwood value chain including efficient production techniques (improved kilns), transportation and marketing; improvement of viable NTFP value chains; and creation of community-controlled forest management funds with a portion of revenues from the sale of fuelwood invested into the funds to cover forest management costs. Communities will be assisted to incorporate into their management plans, sustainable land management aspects including enhancement of soil fertility through agroforestry in agricultural lands.

Component 1 will also deal with **Barrier #2.** Building on capacity established through FORCOM and other initiatives, the project will provide technical assistance to reinforce institutional and community capacities for sustainable forest management for woodfuel production and sustainable land management. Carbon management and monitoring will be part of this capacity building. There are existing training modules which were developed under the FORCOM project covering various themes including: creation, operation and management of community associations; administration, accounting and finance; introduction of participatory methods; management of land conflicts; and preparation of local development plans. These modules will be reviewed and used as a foundation in developing capacity building modules in component 1.

Component 2 will address **Barrier #3.** The project will provide technical assistance to strengthen the legal framework essential for the empowerment of pilot communities in the short term. In the medium-term, based on lessons learned from the implementation of component 1, the project will support more general revisions to the legal framework concerning community forest management. The revisions will provide simple straightforward legal tools for empowering communities to be able to establish rules to control access and use of their forest lands and to be able to sustainably harvest and market wood and non-wood products from these lands. These are important for the widespread replication and adaptation of the sustainable community forest management systems throughout the miombo zone and to other forest types in the country.

Under component 3, technical assistance will be provided for the establishment of a community of practitioners network and the integration of community forest management for sustainable wood fuel production into university curricula. These will facilitate the dissemination of best practices and lessons learned in the proposed project and other related projects, and contribute to knowledge management and the scaling up of results from this project into the National Sub-Programme for Community Forestry. In addition, technical assistance will be provided to set-up a community-based carbon monitoring system to be linked to the national MRV system.

Overall, the GEF investment will bring 100 000 ha of unmanaged miombo forests (10 percent of the Lubumbashi charcoal supply zone) under sustainable management by communities, leading to a reduction in deforestation and forest degradation. The project will provide lessons to be integrated into the National Sub-Programme on Community Forestry and the REDD+ program in DRC.

Miombo forests around Lubumbashi are rapidly disappearing. Without this intervention, the situation will get worse leading to significant loss of ecosystem services these forests provide as described in section 1.1 b).

A detailed description of GEF funded incremental activities is provided in Section 2.

1.3 FAO's COMPARATIVE ADVANTAGE

Sustainable forest management is a core area of expertise for FAO. Building on its experience over the past 60 years, FAO is supporting SFM worldwide through a comprehensive programme covering aspects of forest management and conservation, environmental and economic aspects of forest utilization, and policy and institutions. FAO provides information on all aspects of SFM, direct technical support to countries through normative and field programme activities, and develops and promotes best practice guidelines and technical tools such as the SFM toolbox www.fao.org/sustainable-forest-management/toolbox/

FAO is a founding member of the UN-REDD Programme, and together with UNDP and UNEP is providing coordinated REDD support to countries, consistent with the "One UN" approach. Under the UN-REDD Programme, FAO is supporting the DRC in the development of its national MRV system. In addition, the organization supports several activities in the Congo Basin, including the harmonization of forest policies and programs in the region.

FAO has been instrumental in the development of the Community Forestry Programme in DRC. FAO supported DRC in the implementation of "Projet de développement et de mise en oeuvre de la foresterie communautaire en République Démocratique du Congo", which led to the development of the Community Forestry Programme under PNEFEB and is the foundation for the proposed project as described in section 1.2 above.

FAO is currently supporting the implementation of GEF-funded community-based SFM projects in Africa (e.g. Cameroon) and in other regions, and will ensure exchange of lessons and best practices between these.

1.4 PARTICIPANTS AND OTHER STAKEHOLDERS

Workshops during project preparation as well as meetings with administrative authorities and local communities during field visits helped to identify and consult key stakeholders and beneficiaries of this project. Stakeholders can be grouped into three main categories, local stakeholders, Government institutions and NGOs.

Key **local Stakeholders** in the woodfuel production value chain include local communities and traditional authorities. The chain consists of:

- woodcutters who are mostly young men from the villages between the ages of 17 to 30. They know the local area and are usually the ones that locate the best stands of miombo to harvest;
- charcoal-makers who start out as farmers making charcoal in the dry season and cultivating in the wet season. Many have become full-time, professional charcoal makers year-round. They are of all ages and mostly men. Each typically supports a household of six. About 10 percent of charcoal-makers are women. Over 70 percent of charcoal-makers are from local villages;
- local middlemen who buy charcoal from the charcoal-makers, transport the charcoal to the village/roadside and resell by the truckload or by the bag;
- wholesalers the majority are women who come from Lubumbashi. They sometimes pre-finance the charcoal-makers who then must sell to them at pre-arranged low prices.
- traditional authorities, including head chiefs, group chiefs and village chiefs, give resource/land access rights to local communities and also to people from outside the communities.

The majority of NTPF stakeholders (mushrooms and edible caterpillars) are women.

Table 3. Summary of specific stakeholders and their expected roles in the project

Stakeholders	Expertise and Roles in Project Implementation				
Ministry of Environment and Sustainable Development at the central and provincial (Provincial Coordination for Environment and Conservation office) levels	Main executing partner. Responsible for supervision, coordination, participation and monitoring of project implementation. Will ensure that project execution is in line with evolving national and ministerial priorities and policies.				

Directorate of Forest Inventory and Forest Management	Will contribute to the development of the Miombo Observatory including a system for monitoring carbon at the level of the pilot community forests.
Other relevant ministries and departments (Ministry of Mines, Min. of Agriculture, Min. of Rural Development among others)	These ministries will be involved in the project, particularly through a multi- sectoral platform that will work towards eliminating conflicts between legal frameworks for related sectors and the legal framework for community forestry.
Traditional authorities, especially the Kaponda Chieftanship	Chief Kaponda has played a pioneering role in forest conservation and has been very supportive of the Miombo Project. Traditional chiefs will play a strong role in community awareness raising on community forest management. The chiefs will play a key role in enforcement, both within the community and when community forests suffer from incursions by outsiders.
Local communities	The main stakeholders for the project. The project will support 50 communities to organize themselves into forest management structures and prepare and implement simple sustainable forest management plans.
PREMICONGO (local NGO)	Experience and expertise in community forestry (at Kikonké), community capacity building, participatory mapping, support for displaced people, monitoring of miner's respect for mining standards, agroforestry research. PREMICONGO will be contracted under an LOA to provide training and support to communities.
Association for the Protection of Nature and for Indigenous People of Katanaga (APRONAPAKAT)/GTCR (local NGO)	Experience in governance, defense of community and indigenous rights, participatory mapping, advocacy, community structuring and focal point for a thematic group under REDD. Will be contracted under an LOA to provide training and support to communities in the preparation and implementation of their forest management plans.
Union of Forest Ecologists (UNEF local NGO)	Experience in community forestry at Kikonke through FORCOM. Will support capacity building and awareness raising.
Diocesan Development Office for Katanga (BDD local NGO)	Experience in organizing and structuring communities, organizational problem analysis, ag extension, capacity building, monitoring and evaluation and promotion of innovation. Will be contracted under an LOA to provide and support services to communities.
BUCODED	Expertise in training and capacity building for community organization. May be contracted under an LOA to provide support services to communities.
Natural Resources Network / Katanga	Has expertise in governance and transparency in the forest sector, institutional management, monitoring and advocacy of natural resources, integration of information, education and communication and in community forestry. The Network will play an active role in the revisions to the legal framework in Component 2.
ZEBREAU	Has expertise in human rights, analysis of legal texts concerning natural resources and support to community organizations. Zebreau will play an active role in the revisions to the legal framework in Component 2.
Institut National de recherche agronomique/Katanga	Expertise in agricultural, agroforestry and forestry research and in climate change. Expected to contribute to knowledge management in Component 3.
University of Lubumbashi and the Institut Supérieur Pédagogique	Expertise in research and training, adult education, forest inventory, REDD and climate change. Will play a key role in the implementation of component 3 on knowledge management.
African Minerals and other Mining companies	African Minerals has supported miombo forest restoration by communities and undertook the first carbon accounting in the miombo zone of DRC. African Minerals and other mining companies will be knowledge management partners and will be encouraged to finance replication of miombo sustainable forest management systems.
GIZ/PBF	The project will collaborate with GIZ on multiple aspects including capacity building, legal reform and knowledge management.
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1.5 LESSONS LEARNED FROM PAST AND RELATED WORK, INCLUDING EVALUATIONS

A review of participatory forest management (PFM) across Africa was just completed in late 2013¹⁴. Key findings are the following:

<u>Empowerment of Communities</u>: Community forestry is most successful where empowerment of communities is strongest, especially in terms of: 1) simple and practical procedures and guidelines for legalization of community tenure rights; 2) local community definition of forest management areas; 3) legally recognized community-level management entities; 4) community establishment of community forest management rules governing access and use; and 5) inclusion of marginalized groups that hold a stake in the resource.

Governance and Stakeholder Engagement: Effective community-level institutions are required to develop and implement rules governing access and use of forest resources, and to ensure that costs and benefits of forest management are shared equitably among local forest users. Community institutions are most effective when built on existing structures or when communities are given strong leeway in defining them. It is important to carefully consider vertical (upward, as well as downward) accountability mechanisms, appropriate scale and linkages to existing formal and traditional structures.

Benefits and Incentives: Community forestry is more successful where donor and/or government objectives coincide with community objectives. This is especially true when the benefits and incentives for communities are: clear, tangible and defined in national laws and policies; greater than the transaction and management costs associated with community forestry; and equitably distributed between national and local level stakeholders, as well as within participating communities. Overall, the benefits accrued by communities have been limited, especially where externally-initiated community forestry has focused solely on conservation.

<u>Capacity building</u>: Successes have been noted in building the capacities of community forestry members and foresters to support community forestry, in terms of not only skills, but also legitimacy and social capital. Local forest managers need skills and knowledge required for community forestry. These include technical aspects of sustainable forest management, forest monitoring, forest tenure mapping, record keeping (including finances), and general skills, such as leadership, governance, communication and planning.

Lessons learned from Sahelian West Africa

The oldest PFM initiatives in Africa date back over 30 years and are found in West Africa. PFM in West Africa has always focused primarily on the sustainable production of wood fuels for urban markets. Like the miombo woodlands, these West African dryland forests are very robust and regenerate naturally through stump sprouts and natural seedlings.

PFM in West is usually set up as a commercial enterprise that generates benefits for community members, the community as a whole, for the state though the payment of taxes and for the forest resource itself through various mechanisms for reinvesting a portion of forest revenues back in to the funding of forest management costs. The most successful mechanisms seem to be the creation of community-controlled forest management funds.

An emerging lesson learned for participatory natural resource management in general is the need for a minimum level of ongoing support services for community managers beyond the end of the project or initiative that create the management system. This is now seen as the single greatest barrier to the sustainability of the highly successful community-based wildlife management conservancy program in Namibia. Participatory NRM typically have elected resource management committees and every election

21

¹⁴ Blomley, Tom. 2013. Lessons Learned from Community Forestry in Africa and Their Relevance for REDD+. USAID-supported Forest Carbon, Markets and Communities (FCMC) Program. Washington, DC.

brings the possibility that new official will need training to effectively do fulfil their new mandates. A highly unique solution to this is found in the oldest, but little known, PFM initiative in Africa that was initiated by FAO in Burkina Faso in 1986. The CAF (chantiers d'aménagement forestier) initative in Burkina has a two-tiered community management structure that may be unique in the way it has addressed this problem. The upper tier employs a number of professional staff whose primarily purpose is the provision of support services to the local forest management groups. These support services are funded out of a portion of forest revenues that have been invested back into the forest management fund. These support staff are self-financing and they have been operating that way for almost 30 years.

Another lesson learned is that attempts to legislate protection of miombo forests, including making charcoal illegal, do not work. Charcoal making from natural miombo forests in Malawi has always been illegal, and Malawi has lost 90 percent of their miombo forests and they still have no sustainable natural forest management systems for the production of wood fuels.

1.6 LINKS TO NATIONAL DEVELOPMENT GOALS, STRATEGIES, PLANS, POLICY AND LEGISLATION, GEF AND FAO'S STRATEGIC OBJECTIVES

a) Alignment with national priorities

The Miombo Project is in full alignment with the National Program for the Environment, Forests, Waters and Biodiversity (PNEFEB). PNEFEB main axes cover a) forest management; b) environmental protection; c) water resources management, and; biodiversity conservation. PNEFEB is in alignment with the policies of Communauté Économique des États de l'Afrique Centrale (CEEAC), Southern African Development Community (SADC), and Central African Forest Commission (COMIFAC). The Miombo project will contribute directly to the implementation of the National Sub-Program for Community Forestry.

The Miombo Project is in alignment with the priority actions of the National Environmental Action Plan (PNAE), notably: the sustainable management of resources and lands and natural ecosystems. The Project also supports the second and fourth pillars of the Strategy Document for Growth and Poverty Reduction (DSCRP): 2) diversify the economy, accelerate growth and promote employment, and; 4) protect the environment and combat climate change.

Sustainable management of the miombo forest ecosystems was identified as a priority by the Government under GEF-5 through the National Portfolio Formulations Exercise.

Please also see section 1.1 d) Legal, policy and institutional context.

b) Alignment with Convention Priorities

The project is closely aligned with the DRC's National Action Plan (NAP) for the United Nations Convention to Combat Desertification which identifies rational management of natural resources and decentralization and effective participation of stakeholders as one of the priorities.

The project is consistent with the priority actions on reducing land and forest degradation, and rehabilitation of degraded landscapes identified in the DRC's national communication to UNFCCC. It will contribute to the development/refinement of the REDD+ strategy by providing lessons and best practices on sustainable community-based forest management, and will feed into the ongoing revision of the legislation on the rights of local communities over forests. The project also links up with DRC's National Adaptation Programme of Action (NAPA) which cites the management of forest resources as a priority action for adaptation. Broad governance challenges identified in the NAPA that the project will address include weak legislation and lack of implementation, lack of knowledge on resources and their trends, centralized management and weak stakeholder participation.

c) Alignment with GEF focal area strategies

The project falls within the Land Degradation and Climate Change Focal Areas and supports the achievement of the following GEF strategy objectives:

SFM- 1 The project will promote sustainable management of miombo forests for wood fuel production and support the restoration of degraded forests re-establishing sustainable flows of diverse ecosystem services;

SFM-2 The project will strengthen the enabling environment to reduce GHG emissions from deforestation and forest degradation by strengthening capacities to measure and monitor carbon stocks and will enhance carbon sinks from LULUCF activities through the restoration of degraded miombo forests;

CCM-5 The project will promote conservation and enhancement of carbon stocks through sustainable community-based forest management systems which will incorporate practices that address the highly unsustainable rate of overcutting of miombo forests for wood fuels for urban markets; and

LD-2 The project will generate sustainable flows of forest ecosystem services by transforming the highly unsustainable livelihood contributions of destructive harvest for charcoal-making into sustainable multi-purpose forest production systems that make long term contributions to rural livelihoods.

d) Alignment with FAO Strategic Framework and Objectives

The project will contribute to FAO Strategic Objective 2 "Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner", and particularly to the Organizational Outcome 1"Producers and natural resource managers adopt practices that increase and improve agricultural sector production in a sustainable manner". The Project is in perfect alignment with Output 1.1. "Innovative practices for sustainable agricultural production are identified, assessed and disseminated and their adoption by stakeholders is facilitated", Output 1.2. "Integrated and multi-sectoral approaches for ecosystem valuation, management and restoration are identified, assessed, disseminated and their adoption by stakeholders is facilitated", and Output 1.3. "Organizational and institutional capacities of public and private institutions, organizations and networks are strengthened to support innovation and the transition toward more sustainable agricultural production systems". The Miombo project will contribute directly to Regional priority 3 "Improved management and governance for sustainable use of natural resources", one of the three Regional Priority Action areas defined by the Regional Conference for Africa in Brazzaville, Congo in 2012, and to the implementation of RAF's Regional Initiative 2 on 'Integrated Management of Agricultural Landscapes – Sustainable Production Intensification and Value Chain Development". The project is also in alignment with priorities identified in the FAO Country Programming Framework (CFP 2013-2017), in particular Output 7 on strengthening of systems for participatory management and conservation of biodiversity favoring sustainable economic valorization of land, water, forest and fisheries resources.

2 SECTION 2: PROJECT FRAMEWORK AND EXPECTED RESULTS

2.1 PROJECT STRATEGY

In designing the project, priority has been placed on the production side of the fuelwood equation taking into account: (i) ongoing investments addressing the high demand for charcoal in Lubumbashi and other towns in Katanga. None of these investments have tested nor demonstrated sustainable miombo harvest systems; and (ii) the limited budget. With the funding available, a single project could not hope to adequately address both the supply and demand issues. The project will also deal with the unsustainable shifting cultivation threat by incorporating, within the demonstration and capacity building component, agroforestry techniques for improved wooded fallows, especially relatively long duration (ca ten years) wooded fallows that will be more effective for restoring soil fertility while also increasing the production of forest products from the fallows.

Lack of implementing regulations has been identified as an important gap in the DRC REDD+ readiness process. Part of the strategy is therefore to contribute significantly to the wider enabling environment for sustainable forest management and REDD+ by testing implementing regulations for community forestry, which will inform revisions to the national legal framework.

Intervention area

The initial pilot forest areas were selected for meeting the following criteria:

- a) Kikonké was preselected as representative of the areas of severely degraded agricultural, fallow and forest within the first 30 to 35 km around Lubumbashi. The previous FORCOM project had helped the community restore forests on 2000 severely degraded hectares and the already structured community wishes to bring their restored forest under SFM. Almost no charcoal is currently produced from severely degraded lands;
- b) community lands with intact miombo, and currently under significant threat from unsustainable charcoal production;
- c) community lands with large areas of degraded secondary forest whose productivity is kept low by the by destructive mid to late dry season fires. Only small amounts of charcoal are produced from these lands;
- d) communities, including traditional leaders, that are motivated to invest in community forestry and who do not have significant divisive internal conflicts. Communities that are already structured are given special consideration
- e) relatively easy accessibility of the forest resources.

In total, the project area will cover 110,000 hectares (80,000 hectares forest land and 30,000 hectares agricultural land) and about 50 communities. A brief description of the areas is provided below.

Kikonké: Kikonké is located 35 km to the southwest of Lubumbashi. It has at least 2000 ha of dense young miombo forest that was restored by the community on very severely degraded lands. This was done under the FAO FORCOM project. Key interventions were participatory zoning of 2000 ha for miombo forest restoration, and protection of regeneration from cutting and fires. The Kikonké community is already structured and has clearly demonstrated their ability to undertake develop and apply agreed upon rules governing access and use of their common resources. The Head Chief Kaponda also played a strong role demonstrating his support for miombo forest restoration and management.

Kikonké is ideally suited to be the primary pilot and demonstration site of the project. The dense young forests that have been restored clearly demonstrate how easy miombo forest restoration can be and what can be accomplished by motivated, structured communities with technical assistance. Light, frequent selective thinnings should be ideally suited to the dense, young secondary forest at Kikonke. The proximity to Lubumbashi and the low transport costs also make the site ideal for demonstrating the most intensive forms of management. Finally, although long fallow periods are probably not possible on Kikonké's agricultural lands, improved short duration fallows on individual farmers fields should also make it possible

to demonstrate the agroforestry component of the project. For all these reasons, the testing and development of forest management activities during the first year of the project will be concentrated on the Kikonké site.

Kikonké will be especially effective as a demonstration site for all the communities in the severely degraded 30 to 35 km band around Lubumbashi.

Minga - Sapwe: Minga is located at 90 km from Lubumbashi and Sapwe at 120 km on the asphalt highway to Kasenga and near the outer limit of the Lubumbashi charcoal supply zone. More charcoal comes into Lubumbashi from the Kasenga Road than any other road. Minga - Sapwe are in the heart of the charcoal production zone along this highway. They have sizeable areas of intact miombo and low productivity secondary forests and sizeable areas suitable for long duration improved wooded fallows. Traditional leaders are very aware of the rapid destruction of the miombo forest and they are motivated to invest in participatory management if it can prevent the destruction of their forests. There are no significant internal conflicts in this community. Minga - Sapwe is close to the Kundelungu National Park (IUCN Category II) and sustainable management of the forests should serve as a buffer and contribute to reducing pressures on the park.

Lukutwe: is situated 65 km to the northwest of Lubumbashi on the asphalted Likasi Road. It has a mix of intact and secondary forests that can be brought under management, and the potential for long duration improved agroforestry fallows on their agricultural lands. The community has established a roadside market and has undertaken a number of group actions with the support of organizations like Entreprise Minière. The local population is motivated to prevent the destruction of their forests through participatory management.

92^{ème} **Poteau Site** (92'nd highline pole site) is 30 km to the northeast of Lubumbashi and the dirt road to Kinsevere. A rural market has been created at the 92'nd highline pole on the road. Their proximity to the city allows some community members to transport goods to the city by bicycle. This pilot area has lands that range from severely degraded in the south to intact miombo farther north. The intact miombo this close to Lubumbashi is the result of the relatively poor road access to this area.

Mwawa is located 60 km from Lubumbashi to the south between the roads to Kasumbalea et Sambwa. Mwawa marks the beginning of the area that still has intact miombo relatively close to the road. Mwawa includes areas of very intact miombo forest.

2.2 PROJECT OBJECTIVES

The <u>Global Environmental Objective</u> of the project is to promote the sustainable management and restoration of miombo forest ecosystems in order to reduce carbon emissions from deforestation and forest degradation.

The <u>Development Objective</u> is to improve livelihoods of local communities through the improvement of wood and non-timber forest product value chains.

2.3 PROJECT COMPONENTS

The project has been structured into three interlinked technical components: Development of sustainable community-based forest management systems (Component 1); Strengthening the legal framework (Component 2); and Knowledge management (Component 3). This section describes the scope of the components in terms of outputs and outcomes expected to be achieved.

Component 1: Development of sustainable community forest management systems

A technical support unit (which shall be made up of CPE technical officers – 16, and experts from local NGOs) will lead the implementation of component 1, with technical assistance from national and international consultants.

Three outcomes are expected under this component:

Outcome 1.1 Miombo forests managed sustainably by empowered communities

Outcome indicators:

- 80,000 hectares of degraded miombo forests in the Lubumbashi charcoal supply zone under sustainable management by local communities
- Forest cover restored on 20,000 hectares of severely degraded lands
- 2,846,000 t CO₂ sequestered

This outcome will be achieved mainly by providing technical support to pilot communities to establish forest management structures, to obtain legally recognized forest management rights, and to assist them in the preparation and implementation of simple forest management plans.

Output 1.1.1 50 communities structured for sustainable forest management

During project year 1, the project will work with the technical support unit (which shall be made up of CPE technicians and experts from local NGOs) to support pilot area communities to create a representative, legally constituted community forest management committee. The communities will be supported to: a) negotiate clearly defined, mutally agreed boundaries of their village/community forest lands with their neighbors; b) commit themselves to sustainable use of their forest resources, and; c) commit themselves to the equitable sharing of costs and benefits of forest management, and to involving women in forest management through the forest management committees. The project will then assist each pilot community through the administrative process to obtain legal rights to establish and implement rules governing access and use of the forest and the right to harvest and market forest products, including wood and non-wood products. Typically, each participatory forest management (PFM) community will have its own community forest management committee, but villages may join together to create a single management structure if they chose.

In Year 1, the technical support unit will conduct awareness raising with other interested communities in and around the initial pilot areas and will provide support for PFM development with those who decide that they wish to invest in PFM.

In project year 3, the project will provide technical assistance to create one or more two-tiered community management structures consisting of federations of local community forest management committees. Each two-tiered structure would create a support services unit employing professional staff whose main function would be to give technical support to the community forest management committees in the implementation of forest management plans, especially beyond the end of the project. The support services unit will be funded through community-managed forest funds which shall be set-up as described under Output 1.1.2 below.

Output 1.1.2 Participatory zoning of village lands and simple forest management plans developed and implemented.

The participatory zoning of village lands by the communities, shall be conducted in project year 1 with technical support from the University of Lubumbashi and the project technical support unit. The main purpose of the zoning is for villagers to identify portions of their village lands that will be dedicated to agriculture and portions that will be dedicated to sustainable forest management (including areas to be restored and areas for sustainable harvest). Areas dedicated to SFM will fall into three categories: a) intact miombo; b) low productivity degraded secondary forests; c) severely degraded agricultural and fallow lands. Forest management practices to be implemented in each of the zones are described in table 4 below.

Table 4. Forest management practices to be implemented

Zone	Management practices	Area
Intact Miombo	Forests will be managed under a 10 year cutting cycle	20,000 ha
Forests	with each stand undergoing selective thinnings (every	
	10 years) to stimulate growth of the generally	

	abundant, but repressed, natural regeneration that exists under mature miombo.	
Degraded Miombo Forests	Forests will be put on a 5 to 10 year harvest cycle with the shorter cycle applied where there is sufficient demand for firewood and other small diameter wood products. Where a 10 year cycle is used, half the wood will be removed with each thinning. Where a 5 year cycles is applied, 1/4 the standing volume will be removed with each thinning. A regime of early controlled burns will restore productivity and lead to restoration of full canopy cover. Recently harvested regenerating stands will be protected from fire until the regeneration reaches 2 meters in height.	40,000 ha
Severely Degraded Forests	Severely degraded forests in the 30 to 35 km band around Lubumbashi will be restored primarily through natural regeneration. Either full fire protection or early controlled burns will be practiced. Light selective thinnings will be done every 3 to 5 years.	20,000 ha
To reduce pressu	re on natural miombo forests and at the same time	e help improve soil fertility

To reduce pressure on natural miombo forests and at the same time help improve soil fertility, agroforestry will be promoted on agricultural land – on about 30,000 hectares.

Simple forest management plans will be developed by the communities with support from local NGOs and the technical support unit.

The process of developing simple forest management plans will commence with **testing silvicultural techniques** for forest harvest, forest regeneration and fire management in Kikonke demonstration site (also see FAO SFM toolbox www.fao.org/sustainable-forest-management/toolbox/modules/silviculture-in-natural-forests). Key silvicultural parameters to be defined are the intensity of thinning and the optimal period between thinning. A general principle of silviculture is that productivity can be increased through thinnings as soon as crowns become joined or overlapping. All thinnings are proposed to be selective with the removal of the smaller, suppressed and lowest valued trees and the retention of the highest valued individuals. The value ranking by species will be done separately by each community. Biodiversity conservation will be another criteria for selective harvests, with trees and regeneration of rare species receiving protection. Developing practical criteria and methods for selective thinnings will be a focus area for the project. Damaging wildfires will be avoided either through strict protection or through very light, partial early controlled burns.

For **enterprise development**, the project will not focus on the creation of new enterprises but rather will focus on restructuring and improving existing wood and NTFP-based enterprises to make them more efficient and profitable in harvesting, processing and marketing their products. Existing enterprises are based on individuals or very small groups who harvest forest products, who may undertake very basic processing and who usually market their products at roadside to those who happen to pass. Charcoal makers use the notoriously inefficient traditional earthen kiln. Each enterprise is so small that they have very little knowledge of market conditions and even less bargaining power. Each individual at roadside is competing with everyone else and the easiest way to sell their product is to lower their price. Those who are marketing perishable products like mushrooms are especially vulnerable.

The project (value chain expert) will conduct a thorough value chain analysis, based on the preliminary analysis that was done during PPG, and will identify opportunities for increasing the profitability of community-based enterprises through better production, marketing, and transport. One of the main opportunities is surely found in collective marketing – establishing ongoing business relationships between urban businesses and community-level enterprises so that rural producers are organized to have much larger, marketable quantities meeting minimum standards ready for pickup at a specified time and place.

The community management structures will play a key role in supplying market information to the community-based enterprises.

The main area of creation of new businesses will be at the level of the community forest management structures. Each community management structure will be developed as a simple profit making enterprise that will reinvest a portion of its revenues into the costs of forest management. The management structure may play a key role in collective marketing. For example, they may purchase charcoal from family enterprises when prices are low during the dry season and stock the product for resale when prices are high during the rainy season.

The community forest management structures will be assisted to create and operationalize **forest management funds**. A portion of revenues from the sale of charcoal and other products will be invested back into community-controlled management funds to cover forest management costs. Management costs will include the following:

- Salaries and operational costs of technical support services staff;
- o Direct seeding or even nursery production and outplanting of seedlings
- Patrolling;
- Travel costs for committee members;
- o Travel costs for traditional chiefs to deal with infractions by outsiders
- Annual audit.

The funds will be managed by forest management committees elected by community members in the same way that any elected committee manages funds they are put in charge of. If the communities adopt two tiered structures, the second tier will hire a professional accountant who will keep the books and assist in the financial management. All community management committees will receive intensive training, especially in good governance including transparency and financial safeguards.

The Government will have no direct control over the funds. Annual audits of community funds will be standard practice.

Participatory forest management pilot projects sometimes commit the error of requiring the development of management plans without first undertaking a period of experimentation to determine pragmatic, workable approaches to forest management. Official, but simple and straightforward, management plans will be prepared and approved during Years 2 to 4 of the project.

Output 1.1.3 Biennial capacity development plans for community managers, government services and NGOs developed and implemented.

The basic strategy for capacity building is for qualified project staff including consultants to train trainers (NGOs and government) who will then do community level training. Most of the community level training will be done by local NGOs.

Once the community structures are in place, capacity development plans and core modules will be designed by the project (international and national consultants) in project year 1 and updated in year 3. At the CPE, two offices are directly involved in the project – the Community Forestry Division with 6 technicians and the office of Nature Conservation with 10 technicians. This is the core government services group that will be trained as trainers together with NGO trainers. The trainers, who will then train community managers, charcoal and NTFP producer groups, will be trained in all of the skill sets needed to support sustainable community forest management.

Since one of the main focus of the project is sustainable harvest of miombo forests, and woodcutters are mostly young men from the villages, the project has a big opportunity to build the capacity of young people, and give them a prominent role in the community management structures.

Training modules, built on modules prepared by the FORCOM project, will include:

Governance

1. Awareness raising on sustainable community forest management

- 2. Rights and responsibilities of community management committee members, officers and community members target: all adult community members and youth;
- 3. Organizing and conducting the annual general assembly Committee members
- 4. Transparency and accountability all members
- 5. Enforcement committee members
- 6. Participatory zoning of community lands all members
- 7. Participatory definition of forest management objectives all members
- 8. Opportunities for creation of federated, two-tiered management structures

Natural Resource Management

- 9. Participatory definition of a hierarchy of values of miombo tree species
- 10. How to prepare and conduct selective thinnings applying this hierarchy
- 11. Carbon management and monitoring
- 12. Fire management and early controlled burning
- 13. Implementation of forest management plans
- 14. Direct seeding and regeneration of species that has gone locally extinct
- 15. Adaptive management and annual participatory reviews

Business Development

- 16. Bookkeeping
- 17. Sustainable financing (for management committee)
- 18. SME opportunities for charcoal, firewood and other wood products
- 19. SME specific planning and business development for specific high potential SME
- 20. Basic business planning
- 21. Marketing

Agroforestry

Training on these will be based on existing modules. The intention is to facilitate replication of the results from AFODEK and other initiatives, on agricultural land.

Outcome 1.2 Enhanced productivity on 30,000 hectares of fallow and cropland

Outcome indicator: 10% improvement in land productivity

Output 1.2.1 Agroforestry and improved fallow management practices promoted.

For reasons of efficiency and to avoid dispersion of efforts, agroforestry and fallow management will only be implemented with the same PFM communities covered under Outcome 1.1. Unlike participatory forest management (PFM), these will be done on household-managed fields and fallows. Key technical interventions for the improved fallows will include fire control/management, enhanced regeneration of woody species through direct seeding or planting of nursery stock, selective thinning(s) for domestic use and commercial sale of the wood harvested and the final harvest before the next cropping cycle.

Component 2: Strengthening the legal framework

Implementation of the component will be led by the legal unit within the Ministry of Environment and Sustainable Development (MEDD). The legal unit will facilitate the establishment of a multi-actor drafting and validation committee of legal texts (national and provincial texts). Membership of this committee will include representatives from the MEDD Legal Unit (Cellule Juridique), Centre Le Zebreau (ZEBREAU), Bureau Diocesain de Development (BDD), Structures Faitières, PREMI Congo, and others as necessary. The legal unit will also facilitate the creation of a multisectoral platform with representatives from relevant sectors (land tenure, mines, energy, agriculture) to draft legal texts to make other sectoral legal frameworks compatible with the community forestry legal framework. The project will provide technical support to these processes through one or more senior legal consultant(s).

<u>Outcome 2.1</u> The legal framework presents a clear and simple process for the empowerment of communities for sustainable forest management.

Outcome indicators:

- 50 project pilot communities have legal documents empowering them to establish and implement rules
 governing access and use of their forest and the right to harvest and market forest products, including
 wood and non-wood products.
- new legal texts addressing gaps in the national legal framework for participatory forest management submitted to authorities for approval.
- approved strategy and action plan for adapting and replicating community miombo forest management throughout the province.

The main objective is to improve the enabling legal environment for sustainable community forest management in the Lubumbashi charcoal supply zone, and for DRC. The focus at first will be on establishing experimental regulations that will define procedures, rights and obligations of pilot communities within the Lubumbashi supply zone. Then the national legal framework for community forest management will be revised based on actual field experience of this miombo project and other initiatives, to address existing gaps as described in section 1.2 b).

Output 2.1.1 Experimental regulations for the empowerment of the project communities in the Lubumbashi supply zone are established through ministerial decree(s)

This will be a high priority at the beginning of the project, because communities must be empowered for forest management before the project can begin to assist them to make miombo community forest management pilots operational. The Ministry of Environment and Sustainable Development has made a commitment to issue a **ministerial decree defining experimental regulations** for the empowerment of the communities in the Lubumbashi charcoal supply zone. This decree will remain in effect until the legal framework for community forestry at the national level is revised and adopted (see Output 2.1.2). The regulations will integrate participatory forest management lessons learned from across Africa and will lay out minimum standards for community forest management. Standards will be short and succinct focusing on the essential, such as community commitment to:

- No conversion of community forestland to agriculture or other land uses;
- o Environmental sustainability, especially ensuring adequate forest regeneration;
- Biodiversity conservation, with measures to conserve rare or threatened species;
- Equitable sharing of costs and benefits;
- Respect for forest management plans to be jointly developed and approved;

The ministerial decree will be accompanied by modifications to provincial regulations as needed. The new regulations will ensure that forest products produced under sustainable community forest management will not be taxed more heavily than forest products coming from non-managed forest lands and will remove the existing barriers banning the use of fire and limiting tree harvest to three months a year.

Output 2.1.2 New legal texts addressing gaps in the nation legal framework for community forest management drafted.

The national legal framework for community forestry will certainly need to be revised based on the actual field experience of this Miombo Project and other initiatives. The development of revisions to the legal framework will begin early in project year 4 and will fully integrate the lessons learned and best practices from implementation of component 1.

Output 2.1.3 Legal adjustments are made to other sectors (energy, wildlife, agriculture, land tenure, mines, fire management, tourism, NWFP) to make them compatible with respect to community management.

A multi-sectoral platform will work towards eliminating conflicts between the legal frameworks for other related sector and the legal framework for community forestry. It will also work towards making it possible

for communities to be empowered to manage all of the natural resources within their traditional village lands – forests, wildlife, fisheries, watersheds etc.

Output 2.1.4 A provincial strategy for adapting and replicating sustainable community forest management throughout the province.

Although there are participatory forest management initiatives for woodfuel production for urban markets in at least six West African countries, none of them have developed in-house capacities for replicating these success stories without donor support. Developing such capacities will be the major focus of the provincial strategy. Barriers to replication and adaptation of the Lubumbashi supply zone approach will be analyzed and a participatory strategy for overcoming the barriers will be developed. The strategy will put a strong emphasis on financing mechanisms. One of the main options will be new provincial level fiscal measures that would dedicate a portion of revenues from the taxes on forest products (or other taxes) to the financing of a program for replicating and adapting the sustainable community forest management approach throughout the province. These revenues could also be used to provide a minimum of ongoing support to the existing community forest management structures established by the miombo project.

Drafting of the strategy and facilitation of stakeholder consultations will be led by CPE with support from a consultant.

Component 3: Knowledge management

Implementation of component 3 will be led by the University of Lubumbashi, working with local NGOs and other partners.

<u>Outcome 3.1</u> Knowledge management facilitates the extension and adoption of best practices and lessons learned

Outcome indicator: Project best practices incorporated in at least 1 new participatory forest management initiative in DRC

Knowledge management is critical for perfecting sustainable community forest management systems to be developed and critical for adapting the models to different ecological, cultural and economic contexts. The outcome will be achieved by synthesizing and disseminating best practices and lessons learned through a community of practitioners. A Miombo Observatory will be established within the University of Lubumbashi to monitor and quantify the biophysical status of the miombo ecosystem and socio-economic benefits during and beyond the project.

Output 3.1.1 A community of practitioners network created and experiences related to SFM routinely exchanged

As there are no identified examples of sustainable management of forests that take into consideration sustainable woodfuel production in any of the countries with miombo, it will be a major challenge to develop the knowledge base needed. This will also be a major opportunity for DRC to be a leader in miombo management in the entire miombo zone.

With support from a knowledge management consultant, a network of field practitioners involved in miombo management and conservation in Katanga and drylands of Africa will be created to share and disseminate best practices coming out of the project and for the project to obtain lessons learned in the implementation of related initiatives.

Output 3.1.2 Miombo Observatory operational

A Miombo Observatory will be established within the University of Lubumbashi. The observatory, working with NGOs and community managers will collect data from the community forests and community members to determine the impact of the project. The Observatory will work with the REDD+ MRV team to set up a community-based system for carbon monitoring, which shall be consistent with the national system under development.

Output 3.1.3 Lessons learned and best practices for SFM and soil fertility management incorporated into university and technical schools curricula

The University of Lubumbashi, with other partners, will design a programme and training modules on sustainable participatory forest and soil fertility management. These will also be integrated into SFM training centres established by Bureau Diocésain de développement and Agroforêts pour le Développement de Kipushi (AFODEK) in the villages of Mukoma in Kaponda Chieftanship and in Maisha Karavia).

A study tour to one or more relevant African initiatives that have empowered communities in similar way for the management and co-management of forests for commercial purposes will be facilitated.

Component 4: Project monitoring and evaluation (M&E)

The objective of Component 4 is to monitor and evaluate project progress and the achievement of results. The component will feed the knowledge management component 3. Monitoring and evaluation is described in more detail in section 4.6.

Outcome 4.1 Project implemented and monitored effectively and efficiently

Output 4.1.1: Project M&E system operational, providing constant information on project progress in achieving outcomes and outputs.

The project management unit (PMU) will develop the project's M&E system within the first 6 months of project inception, and ensure its implementation throughout the project.

Output 4.1.2: *Midterm and final evaluations conducted.*

At project mid-point, an independent evaluation will be conducted by an international external consultant who will work under the supervision of the FAO Independent Evaluation Office (OED), and in consultation with project partners. Three months before the end of project implementation a final project evaluation will be conducted.

2.4 GLOBAL ENVIRONMENTAL BENEFITS

- 80,000 hectares of miombo under sustainable forest management by communities;
- 30,000 hectares of agricultural land under agroforestry for soil fertility enhancement and woodfuel production, leading to 10% improvement in land productivity;
- Carbon benefits¹⁵
 - Lifetime (20 years) direct carbon sequestration = 2,266,000 t CO₂
 - o Lifetime (20 years) direct emissions avoided = 573,387 t CO₂

2.5 COST EFFECTIVENESS

To ensure cost-effectiveness and sustainability of project results, a lot of emphasis has been placed on building the capacity of community support institutions - particularly local NGOs, who will continue providing support beyond the project. Experience from the FORCOM project has shown that investing in training NGO technicians as community trainers (NGOs who have proven long-term local experience), and then implementing most of project activities at community level through the trained NGOs, instead of individual consultants, contributes to cost-effectiveness, replication and sustainability of project results.

Collaboration with partners with relevant experience (in Katanga, DRC, the miombo zone, the Congo Basin and West Africa) through the knowledge network that the project will establish is another element that will contribute to cost-effectiveness. Collaboration will ensure that results and products (such as training materials) are shared, and best practices are adapted and replicated in the miombo project and vice-versa.

¹⁵ See Appendix 5 for detailed calculations. Calculations done with support from the FAO "Monitoring and Assessment of GHG Emissions and Mitigation Potential in Agriculture" project team.

Another cost effective measure is the use of one site – Kikonke – as the lead site for silvicultural trials, fire management and agroforestry trials. Kikonke will serve as the main awareness raising and demonstration site for interventions, which will then be replicated and adapted first in the other four initial pilot areas and from there to surrounding communities throughout the charcoal supply zone. This is more cost effective than conducting trials in all pilot sites simultaneously.

2.6 INNOVATIVENESS

As pointed out by the World Agroforestry Centre¹⁶ in most Sub-Saharan African (SSA) countries, charcoal production and trade is viewed negatively and is often an informal and illegal business which reinforces unsustainable production. With a successful implementation of this project, DRC has an opportunity to be among leading countries in SSA in demonstrating sustainable participatory forest management systems for both woodfuel production and management of carbon stocks in dryland forests. Therefore the project will make an important innovative contribution to addressing a major challenge in SSA – how do we produce woodfuel in a sustainable manner such that negative impacts on forests are reduced? – and will also a huge contribution to the development of DRC's REDD+ strategy.

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¹⁶ World Agroforestry Centre. 2015. Charcoal: A driver of dryland forest degradation in Africa?

3 SECTION 3: FEASIBILITY

3.1 ENVIRONMENTAL IMPACT ASSESSMENT

The project is designed to address the impact of unsustainable woodfuel production on the environment. As such it is expected to mitigate negative impacts on the environment. No adverse environmental impacts are likely and it conforms to FAO's pre-approved list of projects excluded from a detailed environmental assessment.

The project is classified as Category C under FAO's Environmental Impact Assessment guidelines.¹⁷

3.2 RISK MANAGEMENT

An identification and ranking of risks has been conducted as well as identification of mitigation measures. Overall, the risks are not exceptionally high and should be manageable. Risks, their ranking and mitigation measures are presented in the following table:

Risk	Probability	Impact	Mitigation measures
Environmental Risks			
Climate change impacts	Medium	Climate change may increase the chances of destructive fire or of forest mortality. It may lead to more frequent crop failure leading people to rely more on destructive harvesting for charcoal.	Mitigation measures included in the design of the project: - building the capacity of communities to manage forest fires, and subsequent inclusion in simple forest management plans; - improvement of the conditions of the forest through restoration and sustainable harvest will improve the biophysical conditions of the forests and increase their resilience to climate change - agroforestry and conservation agriculture techniques in community trainings to contribute to adaptation in crop production.
Social, governance and	d institutional	risks	
Traditional authorities may seek to block or to sabotage community concessions for fear of loss of their prerogatives and their control over the resource.	Medium	Project implementation stalled or delayed. Project will not achieve the targets set, and any targets achieved will not be sustainable	The traditional chiefs will be involved from the beginning – a first meeting with traditional chiefs was held during project preparation. The project will continue to develop strong working partnership with the high-level chief Kaponda who supported the FORCOM project and has expressed pride in being the first chief in the area to conserve forests.
Insufficient political will associated with changes in high ranking key officials, changing priorities, or similar factors.	Low	Project progress stalled	Key Government decision-makers, including the DRC GEF Political Focal Point, will be members of the project steering committee. The project will maintain close communications with key authorities, keeping them briefed on successes and challenges as they develop and on the socioeconomic and environmental benefits of the pilot community forest management systems.

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¹⁷ Category C projects should have minimal or no potential negative environmental or social impacts, either individually or cumulatively. They should not be controversial in terms of the interests of key stakeholders. According to FAO's guidelines, in these projects no further environmental and/or social analysis or assessment is required.

Opposition by powerful stakeholders who benefit from the existing charcoal market chain	Medium	targets set,	not achieve the and any targets will not be	The project will establish and maintain frequent communications with the actors in the existing market chains. There will certainly be both advantages and initial disadvantages to the new woodfuel production systems to be developed. One major advantage for charcoal buyers and producers is that the organized community groups should be able to provide reliable prearranged quantities of woodfuel at a set time and place.
Insecurity: Low level rebel activity occurred around Lubumbashi earlier in 2013	Low	Project stalled.	implementation	Insecurity has been widespread in DRC but not in the Lubumbashi area (apart from the low level incident in 2013). Given the high level of investments in the mining sector, insecurity can be expected to be dealt with rapidly by the Government.

4 SECTION 4: IMPLEMENTATION AND MANAGEMENT ARRANGEMENTS

4.1 INSTITUTIONAL ARRANGEMENTS

The project will work within the existing institutional framework both at national and provincial level, as described in section 1.1d).

The overall client for the project is the Government of the Democratic Republic of Congo through the Ministry of Environment and Sustainable Development (MEDD). All forest land in DRC belongs to the State and MEDD has overall responsibility for formulating and implementing forest policy.

MEDD will be responsible for overall coordination and implementation of project activities, and collaboration with relevant government ministries (Land Tenure, Agriculture, Mines), participating institutions, local NGOs, related programmes and projects including the REDD+ programme and GEF-funded projects. MEDD shall perform the overall coordination and monitoring function through a Project Directorate in Kinshasa and implementation of field activities through the Katanga Provincial Coordination for Environment (CPE).

The Food and Agriculture Organization (FAO) will be the GEF Agency responsible for supervision, and provision of technical guidance during project implementation. In addition, under the Direct Execution Implementation Modality (DEX), FAO will act as a financial and operational Executing Agency responsible for the management of GEF resources and for the procurement of goods and services in full consultation with MEDD (see full description in Section 4.2).

4.2 IMPLEMENTATION ARRANGEMENTS

The Sustainable Development Department (DDD) within MEDD, will be the institutional anchor responsible for overall policy direction and project supervision. DDD will supervise a Project Management Unit which shall be headed by a National Project Coordinator (NPC). DDD will ensure the contribution of the Government to the project and will be fully accountable for the delivery of project results in accordance with the project document. DDD will participate in the selection of consultants and contracts which will be done in accordance with FAO rules and procedures.

DDD will facilitate the establishment of and chair a multi-stakeholder **Project Steering Committee (PSC)**. The PSC will provide general oversight of the execution of the project and ensure that results are being achieved. The PSC will specifically:

- i) provide guidance to the Project Management Unit (PMU);
- ii) ensure that all project activities and outputs are in accordance with the project document;
- iii) review, amend (if appropriate) and endorse all Annual Work Plans and Budgets of the project;
- iv) review project progress and achievement of planned results as presented in Project Progress Reports and Financial Reports;
- v) provide inputs to the mid-term and final evaluations, review findings and provide comments;
- vi) advise on issues and problems arising from project implementation, submitted for consideration by the Project Management Unit or by various stakeholders;
- vii) facilitate dissemination and integration of project outcomes into national policies and programmes as appropriate; and
- viii) facilitate collaboration amongst stakeholders and ensure the timely availability of co-financing sources.

Membership of the PSC will include representatives from other key ministries, including the Ministry of Agriculture, Coordination Provincial de l'Environnement (CPE), Institut Congolais pour la Conservation de la Nature (ICCN), local NGOs, Agroforêts pour le Développement de Kipushi (AFODEK), GIZ, African Minerals, representatives of local communities and traditional authorities, and FAO.

A **Project Management Unit (PMU)** will be established in Lubumbashi. The PMU will be staffed a full-time National Project Coordinator, a full-time participatory forest management expert, an administrative assistant, a driver and short-term consultants paid by the project.

The PMU will be supported by CPE technical and administrative staff through part-time secondment as Government co-financing, and by partner NGOs through Letters of Agreement. The PMU, under the direct supervision of DDD and FAO, will be responsible for the day-to-day management of the project and timely and efficient implementation of and monitoring of approved annual work plans. The PMU will work in close consultation with other partners involved in the execution of project components, the PSC and FAO. Specifically, the PMU will:

- a) Act as secretariat to the PSC;
- b) Organize project meetings and workshops;
- c) Prepare Annual Work Plans and detailed Budgets (AWP/B) and submit these for approval by FAO and the PSC;
- d) Coordinate and monitor the implementation of the approved AWP/B;
- e) During project inception period, review the project's M&E plan and propose refinements, as necessary, and implement the plan;
- f) Prepare six-monthly Project Progress Reports (PPRs) and give inputs in the preparation of the annual Project Implementation Review (PIR) by the FAO Lead Technical Officer. Ensure that all cofinancing partners provide information on co-financing disbursed during the course of the year for inclusion in the PIR;
- g) Coordinate the project with other related on-going activities and ensure a high degree of interinstitutional collaboration; and
- h) Assist in the organization of midterm and final evaluations.

Execution of technical components

The project will work with a number of **executing partners** who will contribute to the execution of specific components/outputs through letters of agreement (LoAs). LoAs will be established with local NGOs for the provision of technical support services in the implementation of components 1 and 3, based on their technical and operational capacities. The NGOs include PREMICONGO, the University of Lubumbashi and others. These partners will be contracted one year at a time with renewal dependent on their performance. LoAs with partners will be based on specific activities in each annual work plan and budget approved by the Project Steering Committee.

Details of provisional responsibilities for individual activities are given in the draft Work Plan in Appendix 2. The PMU will directly oversee the day-to-day execution of all components but will play the strongest direct role in component 1, on the development of sustainable community forest management pilots. Key steps in the empowerment of communities for participatory SFM will always involve direct support from the PMU, working with CPE technical staff and contracted local NGOs.

For strengthening the legal framework for community forest management, MEDD through its Legal Unit will play the lead role. MEDD will be supported in the revision process by a national legal consultant paid by the project. For component 3, the Desertification Division within DDD, in charge of issues related to the fight against land degradation and deforestation together with the University of Lubumbashi will play a key role in the development of the Miombo Observatory, knowledge management reviews and the development of university and technical school course materials on sustainable community forest management and soil fertility management.

FAO's Role

FAO will be the GEF Agency for the project. As the GEF agency, FAO will maintain project oversight to ensure that GEF policies and criteria are adhered to and that the project meets its objectives and achieves expected outcomes in an efficient and effective manner. FAO will report on project progress to the GEF

Secretariat; financial reporting will be to the GEF Trustee. FAO will closely monitor and provide technical support to the project.

As the GEF agency for the project, FAO will:

- manage and disburse funds from GEF in accordance with the rules and procedures of FAO;
- oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers and the rules and procedures of FAO;
- provide technical guidance to ensure that appropriate technical quality is applied to all activities;
- carry out at least one supervision mission per year; and
- report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation
- review, on project progress and provide financial reports to the GEF Trustee.

FAO will also be responsible for the financial execution of the project. This implies that FAO will be responsible for the procurement of goods and services for the project in consultation with project partners based on the annual work plans and budgets approved by the PSC.

The **FAO Representative in the Democratic Republic of Congo** will be the **Budget Holder** (BH) responsible for the timely operational, administrative and financial management of the project. The BH, working closely with the PMU, the FAO Lead Technical Officer and Lead Technical Unit, will be responsible for:

- a) management of GEF resources in accordance with the Project Document, and approved Annual Work Plans and Budgets;
- b) procurement of goods and contracting of services for the project and financial reporting in accordance with FAO rules and procedures;
- c) preparation of annual/six-monthly budget revisions, as required, for submission to the LTO/LTU and the GEF Coordination Unit;
- d) preparation of six-monthly financial reports to be submitted to the GEF Unit and shared with the executing partners and the PSC;
- e) represent FAO in the PSC.

The BH will also be responsible for reviewing and giving no-objection to Annual Work Plans and Budgets (AWP/B), Project Progress Reports and co-financing reports submitted by the Project Management Unit, in consultation with the FAO Lead Technical Officer (LTO), Lead Technical Unit (LTU) and the GEF Coordination Unit.

FAO Project Task Force (PTF): The BH will establish a multi-disciplinary PTF to support the project. Members of the task force will be responsible for supervision of activities in their area of technical competence in collaboration with the LTO and BH.

The FAO Lead Technical Unit (LTU): The Forest Assessment, Management and Conservation Division (FOM) within the FAO Forestry Department will be the FAO LTU for this project. The LTU will support a Lead Technical Officer in the Sub-regional Office for Central Africa in Libreville, Gabon, in providing technical advice and backstopping in consultation with other technical teams in FAO. The LTO will:

- a) review and provide clearance to TORs for consultancies, LOAs and contracts, in consultation with the LTU and relevant technical officers in FAO;
- b) participate in the selection of consultants and firms to be hired with GEF funding;
- review and provide technical comments to draft technical products/reports and, as necessary, ensure clearance by relevant FAO technical officers of final technical products delivered by consultants and contract holders financed by GEF resources before the final payment can be processed;
- d) review and approve project progress reports submitted by the Project Management Unit to the BH;
- e) support the BH in reviewing, revising and giving no-objection to AWP/B to be approved by the Project Steering Committee;
- f) prepare the annual Project Implementation Review (PIR) report to be submitted to the LTU and the GEF Coordination (TCI) for clearance. The PIR will subsequently be submitted to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report;
- g) field annual (or as needed) backstopping missions;

- h) with the LTU, review and clear TORs for the mid-term evaluation, participate in the mid-term workshop with all key project stakeholders, development of an eventual agreed adjustment plan in project execution approach, and supervise its implementation;
- i) with the LTU, review and clear TORs for the final evaluation, participate in the final project closure workshop with all key project stakeholders and the development of and follow up on recommendations on how to ensure sustainability of project outputs and results after the end of the project.

The GEF Coordination Unit in the Investment Centre Division (TCI) will review and clear project progress reports, annual project implementation reviews (PIRs) and financial reports and budget revisions. The unit will also participate in the mid-term and final evaluations and the development of any corrective actions to mitigate eventual risks affecting the timely and effective implementation of the project. The GEF Coordination Unit will, in collaboration with the FAO Finance Division, request transfer of project funds from the GEF Trustee based on 6 monthly projections.

The FAO Finance Division will submit annual Financial Reports to the GEF Trustee. In collaboration with the GEF Coordination Unit, the FAO Finance Division will call for project funds on a six-monthly basis from the GEF.

4.3 FINANCIAL PLANNING AND MANAGEMENT

4.3.1 Financial plan (by component and co-financier)

The total cost of the project including the GEF grant and co-financing is USD 19 024 927:

		Component	Component 2	Component	Component	Project	Total
		1	USD	3	4	Management	USD
		USD		USD	USD	USD	
MEDD	In- kind	3,500,000	500,000	500,000	600,000	500,000	5,600,000
University of Lubumbashi	Grant			1,772,000			1,772,000
PREMICONGO	In- kind	607,000					607,000
OSFAC	Grant			1,200,000			1,200,000
ZEBREAU	In- kind	763,670					763,670
BDD	In- kind	1,500,000					1,500,000
APRON APAKAT	In- kind	398,000					398,000
GIZ	Grant			1,350,000			1,350,000
FAO	Grant			1,300,924			1,300,924
Total Co- finance		6,768,670	500,000	6,122,924	600,000	500,000	14,491,594
GEF		3,332,860	74,000	432,000	478,600	215,873	4,533,333
Total Project		10,101,530	574,000	6,554,924	1,078,600	715,873	19,024,927

4.3.2 GEF inputs

GEF resources USD 4 533 333 will be provided to DRC as a grant and the majority will go towards technical assistance.

4.3.3 Government inputs

The DRC Government through MEDD will provide grant and in-kind co-financing in the form of the Government forest management programme in southeast Katanga, personnel and infrastructure. In addition, the Government will provide office space for the Project Management Unit.

4.3.4 FAO inputs

FAO will provide co-financing comprising technical experts particularly for establishing the MRV.

4.4 FINANCIAL MANAGEMENT AND REPORTING ON GEF RESOURCES

FAO will maintain a separate account in USD for the Project GEF resources showing all income and expenditures. Expenditures incurred in a currency other than USD will be converted into USD at the United Nations operational rate of exchange on the date of the transaction. FAO shall administer the GEF resources in accordance with its regulations, rules and directives.

Financial reports

FAO DRC as the BH, will prepare six-monthly Project expenditure accounts and final accounts for the Project GEF resources, showing the amount budgeted for the year, amount expended since the beginning of the year, and separately, the unliquidated obligations as follows:

- Details of Project expenditures on an output-by-output basis, reported in line with Project budget codes as set out in the Project Document, as at 30 June and 31 December each year.
- Final accounts on completion of the Project on an output-by-output cumulative basis, reported in line with Project budget codes as set out in the Project Document.
- A final statement of account in line with FAO Oracle Project budget codes, reflecting actual final expenditures under the GEF component of the Project, when all obligations have been liquidated.
- An annual budget revision will be prepared by the BH in consultation with the LTO and LTU and submitted for approval to the FAO GEF Coordination Unit.

The BH will submit the financial reports for review and monitoring by the FAO GEF Coordination Unit, and to MEDD. Financial reports for submission to the GEF will be prepared in accordance with the provisions in the GEF Financial Procedures Agreement and submitted by the FAO Finance Division.

Responsibility for cost overruns

The BH is authorized to enter into commitments or incur expenditures up to a maximum of 20 percent over and above the annual amount foreseen in the GEF component of the Project budget under any budget line provided the total cost of the annual budget is not exceeded.

Any cost overrun (expenditure in excess of the budgeted amount) on a specific budget line over and above the 20 percent flexibility should be discussed with the FAO GEF Coordination Unit with a view to ascertaining whether it will involve a major change in Project scope or design. If it is deemed to be a minor change, the budget holder shall prepare a budget revision in accordance with FAO standard procedures. If it involves a major change in the Project's objectives or scope, a budget revision and justification should be prepared by the BH for discussion with the GEF Coordination Unit and eventually with the GEF Secretariat.

Savings in one budget line may not be applied to overruns of 20 percent in other lines even if the total cost remains unchanged, unless this is specifically authorized by the FAO GEF Coordination Unit upon presentation of the request. In such a case, a revision to the budget will be prepared by the BH.

Under no circumstances can expenditures exceed the approved total Project budget for the GEF resources or be approved beyond the completion (NTE) date of the Project. Any over-expenditure is the responsibility of the BH.

Audit

Project GEF resources will be subject to the internal and external auditing procedures provided for in FAO financial regulations, rules and directives and in keeping with the Financial Procedures Agreement between the GEF Trustee and FAO.

The audit regime at FAO consists of an external audit provided by the Auditor-General (or persons exercising an equivalent function) of a member nation appointed by the governing bodies of the Organization and reporting directly to them, and an internal audit function headed by the Inspector-General who reports directly to the Director-General. This function operates as an integral part of the Organization under policies established by senior management, and furthermore has a reporting line to the governing bodies. Both functions are required under the Basic Texts of FAO, which establish a framework for the TOR of each. Internal audits of imprest accounts, records, bank reconciliation and asset verification take place at FAO field and liaison offices on a cyclical basis.

4.5 PROCUREMENT

Goods and services will be procured in accordance with FAO's regulations, rules, procedures, and administrative instructions for procurement and finance. A procurement plan shall be prepared following the approval of the project (inception phase).

4.6 MONITORING, EVALUATION AND REPORTING

4.6.1 Oversight and reviews

Project oversight will be carried out by the Sustainable Development Department (DDD), the PSC and FAO. Project oversight will be facilitated by: (i) documenting project transactions and results through traceability of related documents throughout the implementation of the project; (ii) ensuring that the project is implemented within the planned activities applying established standards and guidelines; (iii) continuous identification and monitoring of project risks and risk mitigation strategies; and (iv) ensuring project outputs are produced in accordance with the project results framework. At any time during project execution, underperforming components may be required to undergo additional assessments, implementation changes to improve performance or be halted until remedies have been identified and implemented.

The PSC will meet every six months. FAO will sign protocol agreements with DDD and the provincial inspection of agriculture, fisheries and livestock (IPAPEL) who will be responsible for the technical monitoring of activities of executing partners, under the global supervision of FAO.

Project revisions

The following types of revisions may be made to this project document with no-objection from DDD, the PSC and the approval of FAO GEF Coordination Unit in consultation with the LTO, LTU and BH:

- Minor revisions that do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation. These minor amendments are changes in the project design or implementation that could include, inter alia, changes in the specification of project outputs that do not have significant impact on the project objectives or scope, changes in the work plan or specific implementation targets or dates, renaming of implementing entities.
- Revisions in, or addition of, any of the annexes of the project document.
- Mandatory annual revisions which rephase the delivery of agreed project outputs or take into account expenditure flexibility.

All minor revisions shall be reported in the annual Project Implementation Reviews (PIRs) submitted by FAO to the GEF Secretariat and Evaluation Office.

4.6.2 Monitoring responsibilities

Monitoring and evaluation (M&E) of progress in achieving project results and objectives will be done based on the targets and results indicators established in the project results framework and annual work plans and budgets. M&E activities will follow FAO and GEF monitoring and evaluation policies and guidelines. The M&E plan will be reviewed and updated, as necessary, during the project inception phase. This will involve: (i) review of the project's results framework; (ii) refining of outcome indicators; (iii) identification of missing baseline information and actions to be taken to collect the information; and (iv) clarification of M&E roles and responsibilities of project stakeholders. The project's M&E system will be established within the first 6 months of project implementation.

The day-to-day monitoring of the project implementation will be the responsibility of the Project Management Unit led by the National Project Coordinator and driven by the preparation and implementation of annual work plans and budgets (AWP/B) and six-monthly project progress reports (PPRs). The preparation of the AWP/B and six-monthly PPRs will represent the product of a unified planning process between main project partners. As tools for results-based-management (RBM), the AWP/B will define activities proposed for the coming project year and provide the necessary details on output targets to be achieved, and the PPRs will report on the achievement of the output and outcome targets. An annual project progress review and planning meeting should be organized by the Project Management Unit with the participation of representatives from key executing partners prior to the Project Steering Committee Meeting. The AWP/B will be submitted to MEDD, FAO and to the PSC for approval. The AWP/B will be developed in such a way that it is always linked to the project's Results Framework to ensure the achievement of outputs and outcomes.

4.6.3 Indicators and information sources

To monitor project outputs and outcomes including contributions to global environmental benefits, specific indicators have been developed in the Results Framework (see Annex 1). Output target indicators will be monitored on a six-monthly basis and outcome target indicators will be monitored on an annual basis if possible or as part of the mid-term and final evaluations.

4.6.4 Reports and their schedule

The specific reports that will be prepared under the M&E program are the: project inception report; Annual Work Plan and Budget (AWP/B); Project Progress Reports (PPRs); annual project implementation review (PIR); technical reports; co-financing reports; and a terminal report. In addition, GEF tracking tools for Land Degradation, Climate Change and SFM/REDD+ will be completed by the project team at mid-term and final evaluation.

Project Inception Report: After FAO approval of the project and signature of the FAO/Government Cooperative Programme (GCP) Agreement, the project will initiate with a six month inception period. An inception workshop will be held and immediately after the workshop, the National Project Coordinator will prepare a project inception report in consultation with the FAO BH and other project partners. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed First Year Annual Work Plan and Budget (AWP/B) and a supervision plan with all monitoring and supervision requirements. The draft report will be circulated to FAO and the Project Steering Committee for review and comments before its finalization. The report should be cleared by the FAO BH (FAO DRC) in consultation with the LTO, LTU and the FAO GEF Coordination Unit and uploaded in FPMIS by the BH.

Annual Work Plan and Budget (AWP/B): The National Project Coordinator will submit to the FAO Budget Holder an Annual Work Plan and Budget for clearance. The AWP/B, divided into monthly timeframes, should include detailed activities to be implemented and outputs (targets and milestones for output

indicators) to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The draft AWP/B is circulated to and reviewed by the FAO Project Task Force (LTO, LTU, GEF Coordination Unit and others), the Project Coordinator incorporates eventual comments and the final AWP/B is sent to the PSC for approval. The final AWP/B will be uploaded in FPMIS by the FAO Budget Holder.

Project Progress Reports: One month before the mid-point of each project year, the PMU will prepare a semi-annual Project Progress Report (PPR). The report will contain the following: (i) an account of actual implementation of project activities compared to those scheduled in the AWP/B; (ii) an account of the achievement of outputs and progress towards achieving project objectives and outcomes (based on the indicators contained in the results framework); (iii) identification of any problems and constraints (technical, human, financial, etc.) encountered in project implementation and the reasons for these constraints; (iv) clear recommendations for corrective actions in addressing key problems resulting in lack of progress in achieving results; (iv) lessons learned; and (v) a revised work plan for the final six months of the project year. The report will also include an estimate of co-financing received from all co-financing partners.

The PPR will be submitted by the PMU to FAO no later than one month after the end of each six-monthly reporting period (30 June and 31 December). The draft PPR will be reviewed and cleared by FAO (BH and LTO). The LTO will submit the PPR to the GEF Coordination Unit for final clearance. The final PPR will be circulated by the BH to the PSC.

Project Implementation Review: The LTO supported by the FAO LTU, with inputs from the Project Coordinator will prepare an annual Project Implementation Review (PIR) covering the period July (the previous year) through June (current year). The PIR will be submitted to the GEF Coordination in TCI for review and approval no later than 15 July. The GEF Coordination Unit will submit the final report to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio.

Technical Reports: Technical reports will be prepared to document and share project outcomes and lessons learned. The drafts of any technical reports must be submitted by the PMU to the FAO Budget Holder in DRC who will share it with the LTO for review and clearance, prior to finalization and publication. Copies of the technical reports will be distributed to the Project Steering Committee and other project partners as appropriate. These will be posted on the FAO FPMIS by the LTO.

Co-financing Reports: The National Project Coordinator will be responsible for collecting the required information and reporting on in-kind and cash co-financing provided by all co-financing partners. The National Project Coordinator will provide the information in a timely manner and will transmit such information to FAO. The co-financing reports should be completed as part of the semi-annual PPRs and annual PIRs.

GEF-5 Tracking Tools: Following the GEF policies and procedures, the tracking tools for Land Degradation, Climate Change and SFM/REDD+ will be submitted at three moments: (i) with the project document at CEO endorsement; (ii) at project mid-term evaluation; and (iii) at final evaluation. These should be completed by Project Coordinator with support from the LTO at mid-term and final evaluation.

Terminal Report: Within two months before project completion, the National Project Coordinator will submit to FAO a draft Terminal Report, including a list of outputs detailing the activities taken under the Project, "lessons learned" and any recommendations to improve the efficiency of similar activities in the future. This report will specifically include the findings of the final evaluation as described above.

4.6.5 Monitoring and evaluation plan summary

Monitoring of project progress will be against indicators identified in the project results framework. These indicators will be further refined, as necessary, in consultation with project stakeholders during the project inception phase. This process of further collaborative refinement of project indicators will facilitate greater stakeholder engagement with the project and support broader monitoring and reporting of project achievements and challenges.

The monitoring and evaluation plan is summarized below.

Type of	Responsible parties	Time frame	Budget
monitoring and evaluation activity			(USD)
Inception Workshop	National Project Coordinator leads the organization, in close consultation with FAO (BH, LTO and FAO GEF Unit).	Within first two months of project inception	10,000
Inception report	National Project Coordinator (NPC) with inputs from project partners. Cleared by FAO and the Project Steering Committee.	Immediately after the project inception workshop	-
Design of monitoring and evaluation system	Monitoring and Evaluation consultant with support from the NPC and FAO Lead Technical Officer	Within the first six months after the project inception	3,000
Field-based impact monitoring and support	PMU with support from other project partners	Continually	315,600
Supervision missions	FAO LTO and FAO DRC	Annual or as required.	Paid by GEF Agency fee
Project progress reports (PPRs)	PMU. Submitted to FAO DRC (Budget Holder). Finalized reports submitted to the FAO GEF Unit by the LTO, and to the PSC by the National Project Coordinator.	Six- monthly	20,000
Project Implementation Review (PIR)	FAO LTO with inputs from the National Project Coordinator and FAO Budget Holder. Submitted by the FAO GEF Coordination Unit to the GEF Secretariat. Final report also submitted to the PSC and the GEF Operational Focal Point by the National Project Coordinator.	Annually	Paid by GEF Agency fee
Reports on co- financing	National Project Coordinator with information from all co-financing partners.	Six monthly and annually as part of PPR and PIR.	-
PSC meetings National Project Coordinator, DDD, FAO Budget Holder		At least once a year .	40,000
Technical reports	PMU, Consultants, FAO	As appropriate	component budgets
Mid- term evaluation	External Consultant, FAO independent evaluation unit in consultation with the project team and other partners	At mid-point of project implementation	40,000

Type of monitoring and evaluation activity	Responsible parties	Time frame	Budget (USD)
Final evaluation	External Consultant, FAO independent evaluation unit in consultation with the project team and other partners	At the end of project implementation	40,000
Terminal Workshop and Report	PMU	At least one month before end of project	10,000
	TOTAL		478,600

4.7 PROVISION FOR EVALUATIONS

An independent Mid-Term Evaluation (MTE) will be undertaken at project mid-term to evaluate progress and the effectiveness of implementation in terms of achieving the project objectives, outcomes and outputs. Findings and recommendations of this evaluation will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term. FAO will arrange for the MTE in consultation with the project partners. The evaluation will, *inter alia*:

- (i) review the effectiveness, efficiency and timeliness of project implementation;
- (ii) analyze effectiveness of partnership arrangements;
- (iii) identify issues requiring decisions and remedial actions;
- (iv) propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
- (v) highlight technical achievements and lessons learned derived from project design, implementation and management.

An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting of the project partners. The FE will aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This evaluation will also have the purpose of indicating future actions needed to sustain project results and disseminate products and best-practices within the country and to neighbouring countries.

4.8 COMMUNICATION AND VISIBILITY

The project will develop a communication strategy that will provide framework for information flow and feedback to all the key stakeholders. Communication activities will focus on outputs, outcomes and good practices from the project. Various communication, awareness raising, dissemination and visibility tools (e.g. press releases, seminars and workshops, newsletters, videos presenting success stories, publications, and production of visibility items) will efficiently be used. The communication/visibility plan and activities will be aligned with the GEF communication and visibility policy (www.thegef.org/gef/policies guidelines/communication visibility), and FAO's corporate communication strategy. All publications will bear the logos of the Government of DRC, FAO and GEF.

5 SECTION 5: SUSTAINABILITY OF RESULTS

5.1 SOCIAL SUSTAINABILITY AND GENDER MAINSTREAMING

A key challenge to social sustainability is the development of the communities' capacities to enforce new rules for forest resource access and use and implementation of forest management plans. This challenge will be addressed by ensuring that all participation is voluntary, that all user groups especially women are represented in community forest management committees, and that they receive intensive training to enhance their capacity. One of the key benefits for communities will be the legal recognition and empowered for control over land and forest resources.

The project will intentionally promote gender equality. Typically, woodcutters and charcoal makers are mostly men and most NTFP are harvested by women. The charcoal cutters frequently harvest trees with little regard to their value for NTFP. With women represented in the community management structures, they will have a say in the development of a hierarchy of relative value of each tree species to be applied in the silvicultural thinning of the managed forests.

The project will make major investments in capacity building, especially for good governance. Experience shows that investments in community capacity for good governance for NRM usually leads to communities applying these capacities across all of the different challenges and problems they are confronted with. Participatory forest management allows all forest user groups to have their say over how the forests are used – and for each of them to defend their interests through the governance systems put in place. At present, there is no mechanism for resolving conflicts between different user groups, and charcoal makers are cutting trees that have much higher values for other purposes.

A minimum of outside supervision, monitoring and support services will need to be maintained and this means a minimum level of funding. A provincial strategy for sustaining, replicating and adapting sustainable community forest management throughout the province will be prepared, with a strong emphasis on financing mechanisms.

5.2 ENVIRONMENTAL SUSTAINABILITY

The project promotes good management of forests to contribute to sustainable use and the reduction of deforestation and forest degradation. In this way, the project directly contributes to environmental sustainability.

The project is going to demonstrate how miombo forests can be managed for sustainable woodfuel production and for carbon sequestration. One of the key factors that make this possible is that miombo forests have one of the most robust ecological capacities for natural regeneration after severe disturbance. This includes disturbance by cutting, conversion to agriculture, overgrazing or improper fire regimes. The ability of miombo forests to regenerate as a function of simple protection has been clearly demonstrated in many countries. It was very well demonstrated at an extremely degraded site at Kikonke near Lubumbashi by the FAO FORCOM project.

5.3 FINANCIAL AND ECONOMIC SUSTAINABILITY

The miombo community forest management model to be developed by this project will probably be the first example of a self-financing participatory natural forest management system for commercial production of wood products in DRC and perhaps in all of the miombo zone. The project will promote the principle that each commercial forest user group should contribute proportionately to forest management costs. The community forest management structures will be assisted to create and operationalize forest management funds. A portion of revenues from the sale of charcoal and other products will be invested back into community-controlled management funds to cover forest management costs.

In addition, the project will support the preparation of a provincial strategy for sustaining and replicating the miombo project results, with a strong emphasis on financing mechanisms. One of the main options will be new provincial level fiscal measures that would dedicate a portion of revenues from the taxes on forest products (or other taxes) to the financing of a program for replicating and adapting the sustainable

community forest management approach throughout the province. These revenues could also be used to provide a minimum of ongoing support to the existing community forest management structures established by the miombo project.

5.4 SUSTAINABILITY OF CAPACITIES DEVELOPED

Sustaining capacities built at the community level is always one of the most difficult challenges for participatory natural resource management of any type. A key complicating factor is the frequent need for new training that comes with almost every election of new management committee members. But an even more general problem is the great difficulty of building and maintaining human resources in impoverished rural communities with high levels of illiteracy. The Namibian Conservancy Program for participatory wildlife management is probably the most advanced program of participatory NRM on the continent. They are now coming to recognize the need for a minimum level of ongoing support services as the key challenge to sustainability of the program. Namibia has a high level of development of both national and international NGOs that are highly committed to the program and are effective in mobilizing donor support. The local NGOs in Lubumbashi have a much lower level of institutional development and a relatively low level of fund-raising capacity.

The project looks to a unique experience in Burkina Faso for inspiration on how to develop self-financing capacities for supporting community managers. Between 1986 and 1993, an FAO project put over 80,000 hectares of wooded savannah forest under community management for the production of wood fuels for urban markets. Each local community management structure also belongs to one of six different second-tiered management structures. Each second tier structure employs a small number of professional staff that provide services to the local community managers. Each community management structure contributes to the costs of the support staff. Alternatively, support services can be accessed from the local NGO communities. The key challenge is for the community managers to have their own funds for accessing support services.

All communities are located on roads, so, for Lubumbashi, one obvious way for local community managers to structure themselves into such federated second-tier structures would be for all of the communities along one of the roads leading to Lubumbashi to group together. The project will encourage communities to create such two-tiered structures but will not oblige them because such imposed structures are rarely sustainable.

5.5 REPLICABILITY AND SCALING UP

The project approach is one of developing participatory forest management as a type of community enterprise that incurs costs and generates profits, especially from the commercial production of woodfuel for urban markets. The participatory forest management model developed should be broadly replicable throughout the miombo zone of Katanga Province wherever there is a significant commercial demand for woodfuel. It should also be relatively easy to adapt the approach for any dryland forests that are within the supply zones for well established markets for other wood products and NTFP. It is not an approach that is suitable for forests where the focus is on protection rather than on sustainable use.

As mentioned, one of the outputs of the project will be a provincial strategy for replicating the participatory miombo forest management throughout the miombo forests of the province wherever conditions are suitable. This will include the geographic delineation of all of the charcoal and fuelwood supply zones of all the urban centers in the province. These charcoal supply zones will be the best candidate areas for replicating the management model developed.

Scaling up will also be facilitated by knowledge management and dissemination of best practices. The development of curricula for community-based forest management at the university and technical school levels will also ensure the human resource base needed for scaling up.

APPENDICES

APPENDIX 1: RESULTS MATRIX

Objective/Impact	Indicators	Baseline	Milestones and Targets	Assumptions
Global Environmental Objective: To promote the sustainable management and restoration of miombo forest ecosystems in order to reduce carbon emissions from deforestation and forest degradation	area of miombo forest under participatory sustainable forest management; Total amount of carbon sequestered and emissions avoided	Estimated annual emissions of 390,000 tons C/year	30,000ha by PY3; 80,000ha by PY5. Lifetime (20 years) direct carbon sequestration = 2,266,000 t CO ₂ Lifetime direct emissions avoided = 573,387 t CO ₂	 a. MEDD and the provincial government pass decrees in YR1 for the provisional empowerment of the project's communities. They undertake revisions to the legal framework starting YR 3 to provide powerful and straightforward legislation for community forest management. b. Communities are able to develop governance capacities for SFM. c. Communities find the
Project Development Objective: To improve the sustainability of livelihoods of local communities through the marketing of wood fuels and nontimbre forest products (NTFP) harvested from sustainably managed forests.	3. Number of communities granted legal forest management rights in southeast Katanga as a results of the project. 4. Percentage of household income from products harvested from PFM forests.	0	At least 30 communities empowered by PY3, 50 communities by PY5. Target to be determined in Year 1.	incentives/benefits for co- management to be clearly superior to the costs.

Component 1: De	velopment of sustaina	ble community fo	rest management s	systems					
Outcome	Indicator	Baseline	Milestones and t	argets				Data Collection and reporting	
/Output	utput		Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsibility for data collection
Outcome 1.1 Miombo forests managed sustainably by empowered communities	Forest area under community management	0			30,000 hectares		80,000 hectares	Field monitoring and supervision; GEF Tracking Tools.	Project Management Unit, DDD
	Number of operational community forest management funds	0			At least 10		At least 20	Monitoring and supervision reports; Independent evaluations.	Project Management Unit, DDD, FAO
Output 1.1.1 Communities structured and empowered for sustainable forest management	Number of communities with forest management committees and legal documents granting forest management rights.	0		10	30		50	Legal documents granting forest management rights to communities.	Project Management Unit; DDD; FAO

Outcome	Indicator	Baseline	Milestones a	Milestones and targets					Data Collection and reporting	
/Output			Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsibility for data collection	
Output 1.1.2 Participatory zoning of village lands and simple forest management plans developed and implemented	Number of simple forest management plans developed and approved	0		10	30		50	Project Progress Reports	Project Management Unit; DDD	
Output 1.1.3 Biennial capacity development plans for community managers, government services and NGOs developed and implemented.	Number of community support personnel trained and providing quality services to project communities (disaggregated by gender).	0		At least 100 field technicians from Government, local NGOs trained on key aspects of participatory forest management and carbon management and monitoring.				Review of services including training delivered to communities and the quality of forest management plans. Project Progress Reports.	Project Management Unit; DDD; FAO	
	Number of forest management committees and	0			At least 500 men and women from			Training reports and evaluation,	Project Management Unit; DDD; FAO	

Outcome /Output	Indicator	Baseline	Milestones ar	Milestones and targets					Data Collection and reporting	
			Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsibility for data collection	
Outcome 1.2 Enhanced productivity on fallow and cropland.	wood and NTFP producers trained. 10% increase in productivity on 30,000 ha	0			community forest management committees, NPFE and woodfuel production groups have received training.		10% increase in productivity on 30,000 ha	quality of forest management plans and their implementati on. Mid-term and final evaluations. Field monitoring; Mid-term and final evaluations	Project Management Unit; DDD; FAO	
Output 1.2.1 Agroforestry and improved fallow management practices promoted	Area under agroforestry and improved fallow practices	0			15,000 ha		30,000ha	Field monitoring; Mid-term and final evaluations	Project Management Unit; DDD; FAO	

Component 2: Strengthening the legal framework										
Outcome	Indicator	Baseline	Milestones and targets					Data Collection and reporting		
/Output			Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsibility for data collection	
Outcome 2.1 the legal framework presents a clear and simple process for the empowerment of communities for sustainable forest management	Approved experimental regulations for the empowerment of the project communities in the Lubumbashi supply zone	0	Approved experimental regulations for the empowerment of the project communities in the Lubumbashi supply zone					Official documents. Project Progress Reports	DDD	
	New legal texts addressing gaps in the national legal framework for community forest management submitted to authorities for approval.	0				New legal texts submitted to authorities for approval.		Official submission of draft texts. Project Progress Reports	DDD	
Output 2.1.1 Experimental regulations for the empowerment of the project communities in the Lubumbashi supply zone are established	Approved experimental regulations	0	Approved experimental regulations					Official documents. Project Progress Reports	DDD	

Component 2: Sti	rengthening the legal f	ramework							
Outcome	Indicator	Baseline	Milestones ar	nd targets				Data Collection	and reporting
/Output			Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsibility for data collection
through ministerial decree(s)									
Output 2.1.2 New legal texts addressing gaps in the nation legal framework for community forest management drafted	Submitted legal texts					Legal texts drafted and submitted to authorities		Official submission of draft texts. Project Progress Reports	DDD
Output 2.1.3 Compatible legal texts for relevant sectors drafted	Submitted compatible legal texts						Submitted compatible legal texts	Official submission of draft texts. Project Progress Reports	DDD
Output 2.1.4 A provincial strategy for adapting and replicating sustainable community forest management throughout the province.	Adopted provincial strategy.						Adopted provincial strategy.	Official record of strategy approval Project Progress Reports	DDD

Component 3: Kn	owledge management								
Outcome	Indicator	Baseline	Milestones and t	argets				Data Collection	and reporting
/Output			Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsibility for data collection
Outcome 3.1 Knowledge management facilitates the extension and adoption of best practices and lessons learned	At least one partner initiative adopts/ incorporates best practices identified in the project	0					At least one partner initiative integrates best practices identified by the end of the project.	Reports from the practitioners' network. Evaluation	Project Management Unit
Output 3.1.1 A community of practitioners network created and experiences related to SFM routinely exchanged	Operational practitioners' network	0	Operational practitioners' network established.					Project Progress Reports	Project Management Unit
Output 3.1.2 Miombo Observatory established	Operational miombo observatory	0	Miombo observatory established					Project Progress Reports	Project Management Unit
Output 3.1.3 Best practices for SFM and SLM incorporated into university and technical schools curricula	Project best practices in community SFM reflected in University of Lubumbashi, technical schools curricula	0				Project best practices reflected in University of Lubumbashi, technical schools curricula		Project Progress Report Evaluation reports	Project Management Unit

Outcome	Indicator	Baseline	Milestones and t	argets				Data Collection	and reporting
/Output			Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Responsibility for data collection
Outcome 4.1 Project implemented and monitored effectively and efficiently	Effectiveness and efficiency as assessed in midterm and final evaluations	0			Mid-term evaluation results.		Final Evaluation results.	Evaluation reports.	FAO Evaluation Office.
Output 4.1.1 Project M&E system in place	Project M&E system operational.	0	A monitoring and evaluation system in place during first 6 months of the project (inception)					M&E reports.	Project Management Unit, DDD
Output 4.1.2 Midterm and final evaluations conducted.	Independent evaluations.	0			Mid-term evaluation		Final evaluation	Evaluation reports.	FAO Evaluation Office.

APPENDIX 2: PROVISIONAL WORK PLAN

Output	Activity			Ye	ar 1			Ye	ar 2			Ye	ar 3			Yea	ar 4			Yea	ır 5	
Output	Activity	Responsable Entity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1: Developme	nt of sustainable community forest n	nanagement systems						<u>l</u>	1	ı							I					
Output 1.1.1 50 communities structured and empowered for	1.1.1.1.Support the creation of community forest management structures	PREMICONGO, BDD, UNEF, APRONAPAKAT,BUCODED	х	х	х	х	х	х	Х	х	х	х	х	х								
forest management	1.1.1.3 Assist communities to obtain the necessary administrative documents, including those granting forest management rights to communities.	OIVEI,	х	х	x	x	х	х	x	x	x	x	х	х								
zoning of village lands and simple forest management plans	1.1.2.1 Support the development of participatory land use zoning of village lands of the pilot communities, and development and implementation of simple forest management plans	BUCODED, DIAF, DFC,	X	x	x	x	х	x	x	x	х	X	x	x	X	x						
	1.1.2.2 Test and integrate silvicultural techniques for forest harvest, forest regeneration and fire management.	Consultant, UNILU, INERA (PREMICONGO, BDD, UNEF)	х	х	х	х	х	х	х	х	х	х	х	х	х	х						
	1.1.2.3 Develop and make operational a participatory system of adaptive management.	Coordination projet/Consultant			х	х				х				х				Х				
	1.1.2.4 Support SME based on wood products and NWFP.	Consultant/ATN (Avec ONG Locales)			х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х
	1.1.2.5 Create community forest management funds and make them operational.	Coordination Projet avec ONG locales			х	х	х	х	х	х	x	х	х	х	х	х	х	Х	х	х	х	X
Output 1.1.3 Biennial capacity development	1.1.3.1 Develop and implement biennial capacity development	Consultant, BDD et autres			х	х	х	х	х	х	Х	х	х	х	х	х	х	Х	х	х	х	х

Output	Activity			Yea	ar 1			Ye	ar 2			Ye	ar 3			Yea	ar 4			Yea	ır 5	
Output	Activity	Responsable Entity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
managers, government	plans for community managers, government services and community support institutions.	ONG																				
- I	1.2.1.1 Support communities in implementing practices.	PMU, DDD, consultants, NGO			х	х	х	х	х	х	х	х	х	х	х	х	х	х	x	X	х	х
Component 2: Strengtheni	ng the legal framework		•			ı	•		1													
Experimental regulations for the empowerment of the project communities in the Lubumbashi supply	2.1.1.1 Support the creation of a multi-actor drafting and validation committee of the specified texts (national and provincial texts issued by the ministry at each level that is responsible for forests)	Consultant, Cellule Juridique		х																		
decree(s)	2.1.1.3 Conduct problem analysis and develop drafts of the legal texts needed at the national and provincial levels.	T		х	х																	
	2.1.1.4 Organize stakeholder consultations in Katanga Province	BCVI, Cellule Juridique				х																
	2.1.1.5 Ensure the follow-up support for the approval and signing of the texts by the appropriate authorities.	Cellule Juridique/CPECN, ZEBREAU, RRN				x	х	х	х	х												
texts addressing gaps in the nation legal	2.1.2.1 Evaluate the pertinence /constraints of the legal framework in respect to relevant experiences and lessons learned	Consultant, BCVI, Cellule Juridique, ZEBREAU, RRN, Structures Faitières,												х	х							

Output	Activity			Yea	ar 1			Yea	ar 2			Yea	ar 3			Yea	ar 4			Yea	ar 5	
Output	Activity	Responsable Entity	Q1	Q2	Q3	Q4																
community forest		PREMI Congo																				
management drafted.	2.1.2.2 Solicit the help of the multi- actor drafting and validation committee (see 1.1.1.)	Consultant, Coordination Projet, CPE													х							
	2.1.2.3 Evaluate and identify the number of legal texts to be drafted.														х							
	2.1.2.4 Conduct the problem analysis and draft the new legal texts.	Consultant, BCVI, Cellule Juridique, ZEBREAU, RRN														х	х					
	2.1.2.5 Organize provincial validation sessions (cfr CCPF)	BCVI, Consultant																х				
	2.1.2.6 Ensure follow-up support for the approval process by the appropriate authorities.	BCVI, Consultant Cellule Juridique, ZEBREAU, RRN																х	х	х	х	х
adjustments are made to other sectors (energy,		Consultant											х									
tenure, mines, fire management, tourism,	2.1.3.2 Support the identification of legal adjustments needed for compatibility.	Consultant, RRN, ZEBREAU, GTCR												x								
NWFP) to make them compatible in respect to community management.	2.1.3.3 Facilitate analysis and consultations concerning the areas of conflict identified.	T												х	х							
	2.1.3.4 Support the drafting of new compatible legal texts	Consultant, RRN, ZEBREAU, GTCR, BDD, UNEF, Bureau Juridique du Gouverneur														х	х	x				

Outrot	A .at. da.			Yea	ar 1			Yea	ar 2			Yea	ır 3			Yea	ır 4			Yea	ar 5	\neg
Output	Activity	Responsable Entity	Q1	Q2	Q3	Q4																
	2.1.4.1 Conduct a diagnostic of the situation.	Consultant, DEP													х							
for adapting and	development of a strategy	Consultant, DEP, CPECN														х	x					
the province is developed.	2.1.4.3 Develop an action plan for strategy implementation	Consultant, DEP, CPECN															х					
	2.1.4.4 Organise a validation workshop	Consultant, DEP, CPECN																х				
Component 3 : Knowledge	management																					
Output 3.1.1. Experiences related to SFM and SLM are	3.1.1.1 Create the community of practitioners	Coordination projet et Partenaires	х	x																		
	3.1.1.2 Conduct periodic reviews (with site visits) of experiences and lessons learned	Coordination projet et Partenaires				х				х				х				х				
	3.1.1.3 Document and prepare periodic syntheses of lessons learned and best practices.	Consultant et partenaires								х	х							х				
	3.1.1.4 Develop and disseminate guidelines on key topics related to SFM and SLM	Consultant et partenaires																	х	Х	х	
Output 3.1.2 Miombo Observatory operational	3.1.2.1 Analyze the feasibility of an observatory and define the best options.	Coordination projet autres Partenaires		х	х																	
	3.1.2.2 Support the development of the observatory.	Coordination projet, UNILU			х	х																
	3.1.2.3 Develop an SFM and SLM	UNILU, BFC, coordination				Х	Х															

Output	Activity			Yea	ar 1			Yea	ar 2			Yea	ar 3			Yea	ar 4			Yea	ır 5	
Output	Activity	Responsable Entity	Q1	Q2	Q3	Q4																
	resource center (associated with the observatory)	Projet et autres partenaires																				
	3.1.2.4 Develop a system of monitoring, including community MRV.	Consultant, UNILU, et autres partenaires			х	х	х															
Output 3.1.3 Lessons learned and best practices for SFM and	3.1.3.1 Develop and diffuse participatory SFM and SLM training modules												х	х	х	х	х	х	х	х	х	х
SLM are capitalized in the curricula of university and technical schools.	3.1.3.2 Assist UNILU to develop and implement a continuing education program on community management of forests	Coordination Projet, DDD,RIFFEAC, GIZ (Stratégie 2020)				x	х	x	х	x	x	х	x	x	x	x	x	x	х	X	X	x
	3.1.3.3 Integrate SFM and SLM training in the centers that will be created by AFODEK and BDD (in the villages of Mukoma in Kuponda Chieftanship and in Maisha Karavia)	BDD,AFODEK, CPP,GIZ					×	х	х	x												
	3.1.3.4 Organize study tours to Zambia or Malawi to learn about conservation agriculture.	PMU, DDD					х															
Component 4: Project Moi	nitoring and Evaluation																					
Output 4.1.1: Project M&E system operational,		PMU	х	х																		
providing constant information on project progress in achieving outcomes and outputs.	4.1.1.2 Implement M&E system	PMU		х	х	х	х	x	х	х	х	х	х	х	х	х	х	х	х	х	Х	х
Output 4.1.2: Midterm and final evaluations	4.1.2.1 Organize independent midterm evaluation	FAO Evaluation Office										х										
conducted.	4.1.2.2 Organize independent final evaluation	FAO Evaluation Office																			Х	

APPENDIX 3: RESULTS BUDGET

E	xpenditur	es by Cor	nponent								E	xpenditure l	y Year		
Description (ORACLE)	Unit	No. of units	Unit Cost	Compnt 1	Compnt 2	Compnt 3	Compnt 4	PM	Total GEF	Year 1	Year 2	Year 3	Year 4	Year 5	Total
SALARIES PROF	ESSIONAL														
Procurement, Finance and Operations Support	Month	60	3,597					215,873	215,873	43,175	43,175	43,175	43,175	43,173	215,873
TOTAL SALARIE	S			-	-	-	-	215,873	215,873	43,175	43,175	43,175	43,175	43,173	215,873
CONSULTANTS															
INTERNATIONA	L CONSUL	TANTS													
Participatory SFM and adaptive management	Month	18	12,000	216,000					216,000	54,000	54,000	54,000	54,000		216,000
Value Chain Analysis	Month	2	12,000	24,000					24,000	24,000					24,000
SME development	Month	2	12,000	24,000					24,000	12,000	12,000				24,000
Sustainable Land Management Expert	Month	6	12,000	72,000					72,000	24,000	24,000	24,000			72,000
Knowledge Management Expert	Month	1	12,000			12,000			12,000	12,000					12,000

E	xpenditur	es by Cor	mponent								E	xpenditure l	by Year		
Description (ORACLE)	Unit	No. of units	Unit Cost	Compnt 1	Compnt 2	Compnt 3	Compnt 4	PM	Total GEF	Year 1	Year 2	Year 3	Year 4	Year 5	Total
MRV Expert	Month	2.5	12,000			30,000			30,000	30,000					30,000
Independent evaluations consultant(s)	Lump sum						60,000		60,000			30,000		30,000	60,000
Sub-total (international)				336,000	-	42,000	60,000	-	438,000	156,000	90,000	108,000	54,000	30,000	438,000
NATIONAL CON	SULTANTS														
National Project Coordinator	Month	60	3,000	60,000	30,000	30,000	60,000		180,000	36,000	36,000	36,000	36,000	36,000	180,000
National PFM expert	Month	60	3,000	180,000					180,000	36,000	36,000	36,000	36,000	36,000	180,000
SLM expert	Month	24	3,000	72,000					72,000	14,400	14,400	14,400	14,400	14,400	72,000
Value Chain Analysis	Month	1	3,000	3,000					3,000	3,000					3,000
Governance - institutional expert	Month	3	3,000	9,000					9,000	4,500	4,500				9,000
Fire Management	Month	2	3,000	6,000					6,000		6,000				6,000
Sociologist/ge nder expert	Month	1	3,000	3,000					3,000	3,000					3,000
SME development	Month	3	3,000	9,000					9,000		4,500	4,500			9,000
Sustainable Finance	Month	4	3,000	12,000					12,000		6,000	6,000			12,000
Legal Expert(s)	Month	7	3,000		21,000				21,000	7,000			7,000	7,000	21,000

E	Expenditur	es by Cor	nponent								E	xpenditure	by Year		
Description (ORACLE)	Unit	No. of units	Unit Cost	Compnt 1	Compnt 2	Compnt 3	Compnt 4	PM	Total GEF	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Provincial Strategy for replication of participatory SFM	Month	2	3,000		6,000				6,000				6,000		6,000
M&E Expert	Month	24	3,000				72,000		72,000	24,000	24,000	24,000			72,000
PMU Admin Assistant	Month	60	1,000				60,000		60,000	12,000	12,000	12,000	12,000	12,000	60,000
Driver	Month	60	860				51,600		51,600	10,320	10,320	10,320	10,320	10,320	51,600
Sub-total (national)				354,000	57,000	30,000	243,600	-	684,600	150,220	153,720	143,220	121,720	115,720	684,600
TOTAL CONSUL	TANTS			690,000	57,000	72,000	303,600	-	1,122,600	306,220	243,720	251,220	175,720	145,720	1,122,600
Locally Contracte	ed Labour														
Locally Hired No Professional Se							40,000		40,000	8,000	8,000	8,000	8,000	8,000	40,000
TOTAL Locally (Contracted			0	0	0	40,000	0	40,000	8,000	8,000	8,000	8,000	8,000	40,000
CONTRACTS										<u> </u>	· .		<u> </u>	·	·
Simple forest management plans development and implementatn				1,935,000					1,935,000		500,000	500,000	500,000	435,000	1,935,000
Community of practitioners, synthesis and dissemination of lessons and best practices						45,000			45,000	9,000	9,000	9,000	9,000	9,000	45,000

E	xpenditur	es by Cor	nponent									E	xpenditure	by Year		
Description (ORACLE)	Unit	No. of units	Unit Cost	Compnt 1	Compnt 2	Compnt 3	Compnt 4	PM	Total GEF		Year 1	Year 2	Year 3	Year 4	Year 5	Total
Community - based MRV						100,000			100,000		20,000	20,000	20,000	20,000	20,000	100,000
Observatory						130,000			130,000		26,000	26,000	26,000	26,000	26,000	130,000
University training modules participatory SFM and SLM						10,000			10,000					10,000		10,000
TOTAL CONTRA	CTS			1,935,000	0	285,000	0	0	2,220,000		55,000	555,000	555,000	565,000	490,000	2,220,000
TRAVEL																
International Consultants				110,000		20,000			130,000		37,500	37,500	27,500	27,500		130,000
National				80,000	7,000	10,000			97,000	-	20,000	20,000	20,000	19,000	18,000	97,000
Independent evaluations team							20,000		20,000				10,000		10,000	20,000
PMU Field Monitoring Travel							10,000		10,000		2,000	2,000	2,000	2,000	2,000	10,000
TOTAL TRAVEL				190,000	7,000	30,000	30,000	0	257,000		59,500	59,500	59,500	48,500	30,000	257,000
TRAINING & WO	ORKSHOPS	5														
Training technicians and NGOs - Participatory SFM and SLM (Training of Trainers)				60,000					60,000		40,000		20,000			60,000

Expenditures by Component								Expenditure by Year								
Description (ORACLE)	Unit	No. of units	Unit Cost	Compnt 1	Compnt 2	Compnt 3	Compnt 4	PM	Total GEF		Year 1	Year 2	Year 3	Year 4	Year 5	Total
Field community training				320,000					320,000		40,000	70,000	70,000	70,000	70,000	320,000
Study Tour						40,000			40,000			20,000		20,000		40,000
Inception (1), terminal (1) and Planning and PSC meetings (6) - including travel							60,000		60,000		12,000	12,000	12,000	12,000	12,000	60,000
Consultations - and validation workshops					5,000				5,000		1,000		1,000	2,000	1,000	5,000
TOTAL Training				380,000	5,000	40,000	60,000	0	485,000		93,000	102,000	103,000	104,000	83,000	485,000
EXPENDABLE PR	OCUREM	ENT														
Office supplies and materials							5,000		5,000		1,000	1,000	1,000	1,000	1,000	5,000
TOTAL EXPENDABLE PROCUREMENT			0	0	0	5,000	0	5,000		1,000	1,000	1,000	1,000	1,000	5,000	
NON-EXPENDA	BLE PROCU	JREMEN'	Г													
4WD Vehicle	unit	1	50,000	50,000					50,000		50,000					50,000
Motorcycles	unit	3	4,000	12,000					12,000		12,000					12,000

Expenditures by Component							Expenditure by Year									
Description (ORACLE)	Unit	No. of units	Unit Cost	Compnt 1	Compnt 2	Compnt 3	Compnt 4	PM	Total GEF		Year 1	Year 2	Year 3	Year 4	Year 5	Total
PMU equipment and furniture (PCs, printer, desks and chairs)							30,000		30,000		30,000					30,000
	TOTAL NON-EXPENDABLE PROCUREMENT			62,000	0	0	30,000	0	92,000		92,000	0	0	0	0	92,000
GENERAL OPERA	ATING EXP	ENSES														
Fuel				30,000					30,000		6,000	6,000	6,000	6,000	6,000	30,000
Operation and Maintenance				35,000					35,000		7,000	7,000	7,000	7,000	7,000	35,000
Miscellaneous				10,860	5,000	5,000	10,000		30,860		6,000	6,000	6,000	6,000	6,860	30,860
TOTAL General Operating Expen	nses			75,860	5,000	5,000	10,000	-	95,860		19,000	19,000	19,000	19,000	19,860	95,860
TOTAL				3,332,860	74,000	432,000	478,600	215,873	4,533,333		676,895	1,031,395	1,039,895	964,395	820,753	4,533,333

APPENDIX 4: DRAFT TERMS OF REFERENCE OF KEY PERSONNEL

National Project Coordinator (NPC)

A National Project Coordinator will be selected jointly by FAO and DDD through a transparent and open selection process. Under the supervision of the FAO Representative in DRC (Budget Holder) and DDD and the technical guidance of the FAO Lead Technical Officer, the NPC will:

- 1. Be directly responsible for the overall functioning and performance of the Project Management Unit (PMU);
- 2. Manage and supervise the human resources allocated to the PMU;
- 3. Prepare and submit Annual Work Plans and Budgets;
- 4. Prepare draft TORs for consultancies and letters of agreement and supervise their implementation;
- 5. Ensure a systematic and regular monitoring of the Project's activities and prepare progress reports for transmission to FAO DRC and the Lead Technical Officer for clearance and approval, and to the PSC;
- 6. Ensure regular communication and coordination with appropriate national, local institutions, project partners and beneficiary stakeholders to ensure effective technical implementation of project activities;
- 7. Serve as FAO's point of contact with the project and project partners;
- 8. Support the timely organization of Project Steering Committee (PSC) meetings, act as Rapporteur for all PSC meetings, and preparation documents and reports (inception, progress and terminal reports).

Minimum requirements

Candidates should meet the following criteria:

- o University graduate degree in forestry, natural resources management or other relevant specialization.
- A minimum of 7 years of relevant professional experience, including practical experience in community-based forest management, project management, institutional networking and decisionmaking.

Selection criteria

- Extent and relevance of experience and skills in project management and project and programme implementation in DRC.
- Extent and relevance of experience related to community-based/participatory forest management.
- Relevance of academic training and field experience in the areas of expertise of the project as well as expertise in participatory approaches and dialogue building in multi-sectoral institutional frameworks.
- Ability to write clear and concise analytical reports for project management, strategic decision making and technical advice on best practices.
- Quality of communication and interpersonal skills.

International Consultant - Participatory SFM

An international consultant will be selected jointly by FAO and DDD through a transparent and open selection process. The consultant will report directly to the Budget Holder (FAO DRC), the FAO Lead Technical Officer and to DDD (through the National Project Coordinator).

Duties and responsibilities

The consultant will provide technical support on community-based forest management. In particular, the consultant will carry out the following duties.

- 1. Provide technical advice and inputs on methodologies and approaches on participatory forest management and all project activities;
- 2. Lead the preparation and implementation of capacity development plans and modules on participatory forest management for community managers, government services and NGOs;
- 3. Lead the delivery of trainings;
- 4. Provide technical advice on establishment of community forest management structures and on the development of simple forest management plans and their implementation;
- 5. Represent the project in relevant technical meetings, seeking to facilitate coordination beneficial to the achievement of the project's objectives;
- 6. Supervise the preparation of and edit technical reports on project topics and contribute to guidelines and other publications associated with the project;
- 7. Support and guide the work of the national consultant National Participatory Forest Management expert;
- 8. Provide inputs in the preparation of the annual Project Implementation Review (PIR) reports.

Minimum requirements

Candidates should meet the following criteria:

- University graduate degree in forestry, natural resources management or other relevant specialization.
- A minimum of 10 years of relevant professional experience, including practical experience in participatory natural resources management, monitoring and evaluation, and institutional networking and decision-making.

Selection criteria

- o Depth of scientific knowledge of the area of expertise (participatory forest management/natural resources management).
- Extent and relevance of experience in programme/project implementation in the DRC or other countries in Africa.
- Ability to write clear and concise analytical reports for project management, strategic decision making and best practices.
- Quality of communication and interpersonal skills.
- Language (French and English)

International Consultant - MRV Expert

An international consultant – carbon monitoring, reporting and verification (MRV) expert will be selected jointly by FAO and DDD through a transparent and open selection process. The MRV expert will report directly to the Budget Holder (FAO DRC) and the National Project Coordinator.

Duties and responsibilities

The MRV consultant will carry out the following duties:

- 1. Lead the design and testing of a community-based MRV system in line with the national MRV system;
- 2. Lead the preparation of training modules and the delivery of training on carbon measurement, management and monitoring;
- 3. Provide technical support to the preparation of carbon monitoring reports for community forests targeted by the project;
- 4. Facilitate networking and exchange with other projects in DRC with REDD+ MRV components;
- 5. Provide technical advice and support on specific emerging issues on carbon management, accounting and monitoring;
- 6. Provide advice and recommendations on funds mobilisation and partnership for the follow-up of the community-based MRV after the end of the project;
- 7. Assess the effectiveness of the MRV system and recommend adjustment as necessary.

Minimum requirements

Candidates should meet the following criteria:

The consultant will be a specialist in carbon management, measurement and monitoring, with:

- University graduate degree in forestry or other relevant specialization.
- A minimum of 7 years of relevant professional experience, including practical experience in the design and implementation of MRV systems.

Selection criteria

- Depth of scientific knowledge of the area of expertise (carbon accounting, management, and monitoring);
- Scientific and technical contributions in the field of expertise;
- Extent and relevance of practical experiences at international level and in developing countries;
- Extent and relevance of experience in programme/project implementation in developing countries in the Africa Region;
- o Quality of communication and interpersonal skills;
- Working experience with GEF projects (asset);
- o Bilingual (French, English).

National Consultant - Monitoring and Evaluation Expert

A national Consultant- M&E Expert will be selected jointly by FAO and DDD through a transparent and open selection process. The consultant will report directly to the Budget Holder (FAO DRC) and to the National Project Coordinator.

Duties and responsibilities

The M&E Expert will provide technical advice on project monitoring and evaluation. In particular, the consultant will::

- 1. Set up the project's M&E system in coordination with the National Project Coordinator;
- 2. Assist the National Project Coordinator in the regular monitoring of the project's activities;
- 3. Contribute to the preparation of Annual Work Plans and Budgets;
- 4. Participate and represent the project in collaborative meetings with project partners and PSC meetings, as required;
- 5. Undertake missions as appropriate to monitor project progress in the field; and
- 6. Perform other related duties as required.

Minimal Requirements:

- 1. Advanced university degree in a field related to natural resources management and project monitoring and evaluation;
- 2. Five years of experience with results-based M&E systems;
- 3. Proven written and communication skills in French;
- 4. Ability to work with various partners (including donors), as a member of a team; and
- 5. Ability to take initiatives and to work with minimum supervision.
- 6. Knowledge of FAO and GEF M&E requirements and knowledge of forestry is desirable.

Project Management Unit Admin Assistant (Secretary)

The PMU Admin Assistant will be selected jointly by FAO and DDD through a transparent and open selection process. The PMU Secretary will work under the direct supervision of the National Project Coordinator and the general guidance of FAO Budget Holder (FAO DRC).

Duties and responsibilities

The PMU Secretary will carry out the following duties:

- 1. Facilitate communications with FAO, national executing partner, other executing partners and collaborative institutions.
- 2. Provide assistance to final editing of technical reports.
- 3. Provide assistance to editing of annual and progress reports.
- 4. Assist the National Project Coordinator in the preparation of the documentation for the Project Steering Committee and the PSC meetings.
- 5. Assist in the organization of meetings and training workshops.
- 6. Perform other related duties as required.

Minimum requirements

Candidates should meet the following criteria:

- Secondary school education and a completed certificate in vocational training;
- o At least 7 years of experience in secretarial work and assistance to project management.

Selection criteria

- o Proficiency in Excel, Word, PowerPoint, MS Office.
- Ability to work productively and harmoniously with people of different national and cultural backgrounds in a team environment.
- Flexibility and ability to work under pressure.
- Working knowledge in English is an advantage.

APPENDIX 5: QUANTIFYING CARBON BENEFITS

The methodology used in calculating the carbon benefits is based on FAO "Monitoring and Assessment of GHG Emissions and Mitigation Potential in Agriculture" (MICCA) tools www.fao.org/climatechange/micca/78838/en/. A deforestation rate of 1 percent per year was derived from the FAO deforestation rates for six miombo countries (FAO State of the World's Forests 2007) and summarized in Campbell et al http://www.cifor.org/miombo/docs/Campbell BarriersandOpportunities.pdf).

The main assumptions used in the calculations are based on data from a study of miombo woodlands just across the border in Zambia in Copperbelt Province in the same rainfall zone (Kalaba, Felix K. 2013. Floristic composition, species diversity and carbon storage in charcoal and agriculture fallows and management implications in Miombo woodlands of Zambia. Forest Ecology and Management Volume 304, 2013, Pages 99–109).

The mitigation potential of the project is based on the substitution of unsustainable fuelwood production with sustainably produced fuelwood, and on the suppression of wild fires. Sustainable production of fuelwood will result in a net increase of long term average C stocks across the entire project area.

The project will focus on three forest areas or categories covering a total area of 80,000 hectares. Intact Miombo Forests (IMF); Degraded Miombo Forests (DMF); and Severely Degraded Miombo Forests (SMF). The management practices that will be implemented for optimal carbon benefits is a function of the state of the forests in these areas:

<u>Intact Miombo Forests (IMF)</u>. IMF covers 20,000 ha of the project area. This forest type includes areas where the carbon cycle of miombo has not been deeply impacted. Consequently, carbon stocks are not degraded. The proposed realistic schedule for bringing the 20,000 ha of IMF under management is as follows:

- o Year 1: none
- Year 2: 1/3 of the area put under management
- Year 3: 1/3 of the area put under management
- Year 4: 1/3 of the area put under management
- Year 5: No new areas brought under management

Using data from Kalaba et al. 2013 "Floristic composition, species diversity and carbon storage in charcoal and agriculture fallows and management implications in Miombo woodlands of Zambia", current average above-ground biomass carbon stock in IMF is 39.6 t C ha⁻¹. IMF will be managed under a 10-year cutting cycle with parcels within IMF undergoing selective harvest, that consequently leads to the removal of about 50 percent of the standing timber in a parcel every 10 years i.e. half of the biomass is lost in the first parcel at years 1 and 11 of a 20 year management cycle, half is lost in the second parcel in years 2 and 12, half in the third parcel in years 3 and 13, and so forth.

Consequently, the above-ground biomass carbon stock is expected to be reduced to 30.7 t C ha^{-1} so that the C stock loss is 8.9 t C for each hectare of miombo forest brought under management. This value has been calculated by assuming that the C stock recovers at an annual increment rate of $1.98 \text{ t C ha}^{-1} \text{ yr}^{-1}$ (Kalaba et al., 2013). What also has to be taken into account is avoided deforestation and associated carbon stock losses. With long term average C stock of degraded miombo forests 9.9 t C ha^{-1} , the avoided carbon stock loss is calculated as $30.7 - 9.9 \text{ t C ha}^{-1} = 20.8 \text{ t C ha}^{-1}$.

Potential lifetime (20 years) carbon benefits = Avoided Emissions from Deforestation + Emissions and Removals from Forest Management – Reference Level.

For IMF this is equal to $(20,000 \ ha * 1\% * 20 \ years * 20.8 \ t \ C \ ha^{-1} + 20,000 \ ha * -8.9 \ t \ C \ ha^{-1}) * = -94,800 \ t \ C * 44/12 = -347,600 \ t \ CO_2$.

Where 1% is the deforestation rate¹⁸ and 44/12 is the conversion factor to CO₂.

Therefore, putting intact miombo forests under management has a negative impact on the average carbon stock (20 years) because for each hectare set under management 8.9 t C are emitted; and even though this is set off by the avoidance of conversion of IMF to other uses through a continuous process of degradation, positive mitigation impact will be realised after 40 years.

<u>Degraded Miombo Forests (DMF)</u>. DMF covers 40,000 ha of the project area. This forest type includes areas where the carbon cycle of miombo forests has been impacted strongly by human activities that have degraded carbon stocks. These forests have been cutover for charcoal and woodfuel in the past, sometimes followed by cropping. Their natural regeneration has been severely impeded by recurrent, uncontrolled mid-to-late season fires.

The schedule for bringing the 40,000 ha of DMF under management is as follows:

- Year 1: 2,000 ha of 9-years old secondary forest put under management. The 2,000 ha were placed under protection 9 years before project start-up
- Year 2: 1/3 of the area put under management
- Year 3: 1/3 of the area put under management
- Year 4: 1/3 of the area put under management
- o Year 5: No new areas brought under management

DMF will also be managed under a 10-year cutting cycle with parcels undergoing selective harvest that removes 50% of standing timber every 10 years. The current above-ground biomass carbon stock is 9.9 t C ha⁻¹. However, the potential annual net increment rate is the same as that of managed IMF i.e. 1.98 t C ha^{-1} yr⁻¹, since their productivity is still intact. Consequently, the average above-ground biomass carbon stock will grow from 9.9 t C ha⁻¹ to 23.3 t C ha⁻¹. The assumption is that half the biomass is lost at years 1 and 11 for the first parcel, at years 2 and 12 for the second parcel, for years 3 and 13 for the third parcel, and so forth. By placing DMF under management, the C stock gain is 13.4 t C for each hectare of degraded miombo forest subject to sustainable management (23.3-9.9 t C). With long term average C stock of severely degraded miombo forests judged to be 1.98 t C ha⁻¹, the avoided carbon stock loss is calculated as 9.9 - 1.98 t C ha⁻¹ = 7.92 t C ha⁻¹.

Potential lifetime (20 years) carbon benefit for DMF = $(40,000 \ ha * 13.4 \ t \ C \ ha^{-1} + 40,000 \ ha * 1\% * 20 \ years * 7.92 \ t \ C \ ha^{-1})$ = 599,360 t C = 599,360 t C * 44/12 = 2,197,653 t CO₂

<u>Severely Degraded Miombo Forests (SMF)</u>. SMF covers 20,000 ha of the project area. This forest type includes areas where the carbon cycle of miombo forests has been so impacted by overcutting and fires that carbon stocks are degraded at a level that is not consistent with the definition of forest land. The schedule for bringing the 20,000 ha of SMF under management is as follows:

Year 1: None.

V--- 2

• Year 2: 1/3 of the area put under management

- Year 3: 1/3 of the area put under management
- Year 4: 1/3 of the area put under management
- Year 5: No new areas brought under management

The current average above-ground biomass carbon stock is judged to be 1.98 t C ha⁻¹, and because of the very high number of live stumps the potential annual net increment rate of protected managed stands is judged to be the same as in intact forest, i.e. 1.98 t C ha⁻¹ yr⁻¹.

 $^{^{18}}$ Derived from the FAO deforestation rates for six miombo countries summarized in Campbell et al for 1990 to 2000 and 2000 to 2005

In this forest type, forests will be managed under a 5 year cutting cycle with each parcel within SMF undergoing a selective harvest that removes 33 percent of the standing timber every 5 years. Consequently, the average above-ground biomass carbon stock will grow from 1.98 t C ha-1 to 15 t C ha⁻¹. This value, i.e. 15 t C ha⁻¹, has been calculated by assuming that 1/3 of the biomass is lost at years 5, 10, 15 and 20 of the 20-years cycle, in all cases harvesting occurs after the growing season, and that the C stock recovers at an annual net increment rate of 1.98 t C ha⁻¹ yr⁻¹.

With the long term average C stock, within the first 20 years, of a formerly severely degraded forest subject to sustainable management 15 t C ha⁻¹, and the long term average C stock of severely degraded miombo forests 1.98 t C ha⁻¹, the C stock gain is 13 t C for each hectare of severely-degraded miombo forest subject to sustainable management.

Therefore, across the 20-years time period, the potential total amount of CO2 net removals (i.e. mitigation potential) associated by the sustainable management of severely-degraded miombo forests will be: $20,000 \ ha * 13 \ t \ C \ ha^{-1} = 260,000 \ t \ C = 260,000 \ t \ C * 44/12 = 953,333 \ t \ CO_2$.

The total mitigation potential for the overall project over 20 years (lifetime period) is 764,560 t C or 2 ,803,387 t 2 CO 2 . This consists of emissions avoided (negative during the lifetime period) and carbon sequestered.

Displacement of emissions: The implementation of the project activity will increase dramatically the availability of fuelwood in the project area. Indeed, considering that intact miombo forest are not currently supplying fuelwood and that the amount of fuelwood supplied by degraded forest and severely-degraded forests is limited to $0.7 \text{ t ha}^{-1} \text{ yr-1}$, the current amount of fuelwood produced in the region where the project will be implemented can be estimated at $0.7 \text{ t ha}^{-1} \text{ yr}^{-1} * 60,000 \text{ ha} = 42,000 \text{ t yr}^{-1}$. The project implementation will raise such amount at 129,250 t yr $^{-1}$. (value calculated across a 20-years time period). Consequently, displacement of emissions is not seen as an issue for this project; on the contrary, the increase of fuelwood supply is expected to have positive impact, in terms of reduction of pressure, on forests located outside the boundaries of the project.

APPENDIX 6: ENVIRONMENTAL AND SOCIAL SCREENING

PROJECT ENVIRONMENTAL AND SOCIAL SCREENING (ESS) CHECKLIST

For each question only 1 of 4 boxes must be checked: Not Applicable (N/A), No, Yes or Unknown.

Would the project, if implemented?	Not Applicable	No	Yes	Unknown
I. FAO VISION/STRATEGIC OBJECTIVES				
Be in line with FAO's vision?			Χ	
Be supportive of FAO's strategic objectives?			Χ	
II. FAO KEY PRINCIPLES FOR SUSTAINABILITY IN FOOD AND AGRICULTURE				
Improve efficiency in the use of resources?			Χ	
Conserve, protect and enhance natural resources?			Χ	
Protect and improve rural livelihoods and social well-being?			Χ	
Enhance resilience of people, communities and ecosystems?			Χ	
Include responsible and effective governance mechanisms?			Χ	
ESS 1 NATURAL RESOURCES MANAGEMENT				
Management of water resources and small dams				
Include an irrigation scheme that is more than 20 hectares or withdraws more than 1000 m3/day of water?		Х		
Include an irrigation scheme that is more than 100 hectares or withdraws more than 5000 m3/day of water?		Х		
Include an existing irrigation scheme?		X		
Include an area known or expected to have water quality problems?		Х		
Include usage of non-conventional sources of water (i.e. wastewater)?		Х		
Include a dam that is more than 5 m. in height?		Χ		
Include a dam that is more than 15 m. in height?		Х		
Include measures that build resilience to climate change?			Χ	
* Tenure				
Negatively affect the legitimate tenure rights of individuals, communities or others?		Х		
ESS 2 BIODIVERSITY, ECOSYSTEMS AND NATURAL HABITATS				
Make reasonable and feasible effort to avoid practices that could have a negative impact on biodiversity,			Х	

Would the project, if implemented?	Not Applicable	No	Yes	Unknown
including agricultural biodiversity and genetic resources?				
Have biosafety provisions in place?	Х			
Respect access and benefit-sharing measures in force?			Х	
Safeguard the relationships between biological and cultural diversity?			Х	
Protected areas, buffer zones and natural habitats				
Be located such that it poses no risk or impact to protected areas, critical habitats and ecosystem functions?			Х	
ESS 3 PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE				
❖ Planted forests				
Have a credible forest certification scheme, national forest programmes or equivalent or use the Voluntary	Х			
Guidelines on Planted Forests (or an equivalent for indigenous forests)?	Х			
ESS 4 ANIMAL - LIVESTOCK AND AQUATIC- GENETIC RESOURCES FOR FOOD AND AGRICULTURE				
Involve the procurement or provision of pesticides?	Х			
Aquatic genetic resources				
Adhere (Aligned) to the FAO Code of Conduct for Responsible Fisheries (CCRF) and its related negotiated	Х			
instruments?	^			
Be aligned, where applicable, with FAO's strategic policies established in the FAO Technical Guidelines for	Х			
Responsible Fisheries (including aquaculture)?	^			
Livestock genetic resources				
Be aligned with the Livestock Sector Strategy including the animal disease, public health and land degradation	Х			
provisions?	^			
ESS 5 PEST AND PESTICIDES MANAGEMENT				
Involve the procurement or provision of pesticides?		Χ		
Result in increased use of pesticides through expansion or intensification of production systems?		Χ		
Require the disposal of pesticides or pesticide contaminated materials?		Χ		
ESS 6 INVOLUNTARY RESETTLEMENT AND DISPLACEMENT				
Avoid the physical and economic displacement of people?			Х	
ESS 7 DECENT WORK				
Adhere to FAO's guidance on decent rural employment, promoting more and better employment opportunities			X	
and working conditions in rural areas and avoiding practices that could increase workers' vulnerability?			^	
Respect the fundamental principles and rights at work and support the effective implementation of other			X	
international labour standards, in particular those that are relevant to the agri-food sector?				
ESS 8 GENDER EQUALITY				

Would the project, if implemented?	Not Applicable	No	Yes	Unknown
Have the needs, priorities and constraints of both women and men been taken into consideration?			Х	
Promote women's and men's equitable access to and control over productive resources and services?			Х	
Foster their equal participation in institutions and decision-making processes?			Х	
ESS 9 INDIGENOUS PEOPLES AND CULTURAL HERITAGE				
Are there any indigenous communities in the project area?			Х	
Are project activities likely to have adverse effects on indigenous peoples' rights, lands, natural resources,				
territories, livelihoods, knowledge, social fabric, traditions, governance systems, and culture or heritage		Χ		
(tangible and intangible)?				
Are indigenous communities outside the project area likely to be affected by the project?		Χ		
Designed to be sensitive to cultural heritage issues?			Х	

Risk Classification Certification Form

After completing the Environmental and Social (E&S) Screening Checklist, the Lead Technical Officer (LTO) completes and certifies this Certification Form and attached the E&S Screening Checklist to this form.

Р	roject symbol: GCP/DRC/046/GFF									
Р	Project title: Community-based miombo forest management in south-east Katanga									
Α.	RISK CLASSIFICATION									
	X Low Moderate High									
1.	Record key risk impacts from the E&S Screening Checklist									
	A C. minimal or no adverse impacts									
	B									
2.	Has the project site and surrounding area been visited by the compiler of this form?									
	X Yes No									

B. STAKEHOLDER CONSULTATION/ENGAGEMENT

Identification of Stakeholder(s)	Date	Participants	Location
Ministry of Environment and Sustainable Development; Protection des Ecorégions de Miombo au Congo; Bureau Diocésain de développement; Action pour la Protection de la Nature et des Peuples Autochtones du Katanga; Coordination Provincial de l'Environnement	August 2013	participants from Government, NGOs and the University of Lubumbashi	Lubumbashi
Local authorities (chiefs) and communities – Kikonke area, Vietnam area and other villages; GIZ; African Mines; Groupe de Recherches et d'Echanges Technologiques	October 2014	6-8 meetings (group of 10 people)	Lubumbashi and surrounding Katanga villages
Consultations with communities by the project preparation team	May – September 2014	Communities in the Lubumbashi charcoal supply zone in Katanga	Lubumbashi charcoal supply zone in Katanga
Meeting between the project team and local chiefs	November 2014	20	Lubumbashi

A	C	
В	D. No adverse Impacts	
2. Have any of the stakeholders raised co	oncerns about the project?	
None of the Stakeholders raised any concern	about the project.	
The LTO confirms the information above		
Date <u>31 August 2015</u>		
Signature_Jean-Claude Nguinguiri		

1. Summarize key risks and impacts identified from the stakeholder engagement