



REQUEST FOR MSP APPROVAL
PROJECT TYPE: Medium-sized Project
TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title:	Sustainable Land Management and Climate Change Mitigation Co-benefits (SLM-CCMC)		
Country(ies):	Global	GEF Project ID: ¹	5698
GEF Agency(ies):	UNEP (select) (select)	GEF Agency Project ID:	01252
Other Executing Partner(s):	UNEP DEWA, Colorado State University, World Bank	Submission Date:	23/07/2015
GEF Focal Area (s):	Land Degradation	Project Duration (Months)	36
Name of parent program (if applicable):		Project Agency Fee (\$):	171,456

A. FOCAL AREA STRATEGY FRAMEWORK²:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Co-financing (\$)
(select) LD-4			GEFTF	1,804,800	1,561,512
(select) (select)			(select)		
(select) (select)			(select)		
Total Project Cost				1,804,800	1,561,512

B. PROJECT FRAMEWORK

Project Objectives: The objective of this project is to create an environment which will make it easier for land management project managers to realise the climate change co-benefits of sustainable land management practices.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Co-financing (\$)
1. Training and outreach for existing tools - The CBP Simple and Detailed Assessment and WOCAT tools where appropriate	TA	1.1. Enhanced capacity of GEF Project managers and selected GEF Agency personnel to measure, monitor and model carbon benefits resulting from GEF land management projects in several GEF agencies (UNEP, UNDP, IFAD, FAO, ADB). and for GEF project personnel.	1.1 Assessments of C benefits made using the Simple and Detailed Assessments for GEF and non-GEF projects involved in training sessions (~40 projects). 1.2 Documentation of good/best practice land management practices in terms of C benefits. 1.3 In depth implementation of the CBP's Simple or Detailed Assessment	GEFTF	540,000	565,000

¹ Project ID number will be assigned by GEFSEC.

² Refer to the reference attached on the [Focal Area Results Framework and LDCF/SCCF Framework](#) when filling up the table in item A.

³ PMC should be charged proportionally to focal areas based on focal area project grant amount in Table D below.

			<p>in 5 GEF projects with the on-going support of the SLM CCMC.</p> <p>1.4 Project managers trained to document good/best land management practices, linked to CBP assessment for 5 GEF projects</p>			
<p>2. Enhancement of existing tools - Enhancement of CBP tools and development of an interface to WOCAT tools and database</p>	TA	<p>2.1 SLM and NRM projects using the combined tool set to identify appropriate C friendly practices track and report them once implemented and engage with C finance schemes where appropriate.</p>	<p>2.1 An enhanced toolset with increased efficacy in terms of spatial data and accessibility as well as direct relevance to specific finance/certification schemes</p> <p>2.2 An interlink between the CBP and WOCAT tools.</p> <p>2.3 A reporting database for UNEP/GEF staff to access store and analyse reports generated by the CBP system.</p>	GEFTF	644,800	438,072
<p>3. Comparative analysis of carbon accounting tools for sustainable land management</p>	TA	<p>3.1 GEF and other managers of SLM projects have enhanced understanding of the wide range of tools available (outside of and including the CBP tools) and their application contexts.</p>	<p>3.1. A practical guidance manual for GEF and other managers of SLM projects for choosing the most appropriate tools to measure carbon benefits and guidance note.</p> <p>3.2 An internet-based training module on the Learning Management System (LMS) on "GHG accounting for SLM operations"</p>	GEFTF	500,000	500,000
4. Project Management	TA			(select)		
Subtotal					1,684,800	1,503,072

Project Management Cost ³		GEFTF	120,000	58,440
Total Project Cost			1,804,800	1,561,512

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

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Cofinancing Amount (\$)
Private Sector	Colorado State University	In-kind	501,512
GEF Agency	UNEP	In-kind	250,000
GEF Agency	World Bank	In-kind	500,000
Others	University of Bern (WOCAT)	In-kind	250,000
Others	Eco&Sols	In-kind	60,000
(select)		(select)	
Total Cofinancing			1,561,512

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

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
UNEP	GEFTF	Land Degradation	Global	1,804,800	171,456	1,976,256
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources				1,804,800	171,456	1,976,256

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.

² Please indicate fees related to this project.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
International Consultants	237,316	90,180	327,496
National/Local Consultants			0

G. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

(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).

PART II: PROJECT JUSTIFICATION

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

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NBSAPs, national communications, TNAs, NCSA, NIP, PRSPs, NPFE, Biennial Update reports, etc.

This project is global and multi-country. It will work with GEF project managers from a variety of countries depending on where need and interest arise under the guidance of GEF STAP. There will be a focus on training in regions which did not receive training under the previous CBP project namely the Indian sub-continent, southern Africa, West Africa and Eurasia. The project will work with projects in non-Annexe 1 countries to help them to contribute to the realization of some of the aims and objectives of the UNFCCC which requires all Parties to formulate and implement programmes containing measures to mitigate climate change. In particular; "Article 4, paragraph 1(d): Promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all GHGs not controlled by the Montreal Protocol, including biomass, forests as well as other terrestrial ecosystems." Relevant output will be sent to climate change focal agencies in those countries involved in the project to allow output to be considered in country NAMAs and biennial reports.

The project will also work with GEF projects in arid and semi-arid areas to help them contribute to the realization of some of the aims and objectives of the UNCCD, by identifying and promoting best practices for the maintenance and buildup of soil organic matter which in turn contributes to the mitigation of desertification and drought in addition to the sequestration of atmospheric carbon. This will be further strengthened by the projects collaboration with the KMST office of the UNCCD.

The UNCCD secretariat considers supporting Parties with developing INDCs (intended nationally determined contributions) in the land use sector as GHG reduction targets for a post 2020 climate agreement. The CBP tool could be of great value for countries in estimating the mitigation potential of specific SLM and restoration activities/policy as part of their INDC development process. The project will therefore keep in close contact with UNCCD to disseminate information about tool availability, training events and enhanced capacity of the tools as it is delivered. Components 2 will work closely with UNCCD to help align the tools with the conventions aim to achieve land degradation neutrality (LDN) by 2030. By providing guidance on how to use the tools within a carbon market framework the project will be useful for LDN activities to be funded through C markets.

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

This proposed work will address of the priorities of the GEF focal area of Land Degradation (LD). The project will help to further promote sustainable land management through recognition of the climate change co-benefits it achieves. The work addresses the following priorities of the LD focal area: to promote sustainable agriculture by recognizing multiple benefits that arise from it, to take a landscape approach to land management and assessments of the benefits that arise, and to promote the sustainable management of rangelands and forests. This will be realized by the linking of existing carbon benefits tools to a data base of best practice technologies for sustainable land management (WOCAT). Through the CBP, GEF has already provided support to create a methodology for estimating carbon stocks and avoided emissions. This project will further capitalize on this support by ensuring that training and information on the methodology are provided to GEF and other project managers. It will also

⁴ For questions 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.

provide guidance to GEF and other project managers on the range of tools and methods that are available and how to match specific tools and methods to the requirements of individual projects.

A.3: The GEF Agency’s comparative advantage.

UNEP Division of Environmental Policy Implementation (DEPI) will act as the Implementing Agency. UNEP, through its Division of Early Warning and Assessment (DEWA) acted as the main Executing Agency (EA) for the GEF's Carbon Benefits Project (CBP). It is therefore well connected with all of the partners in this proposed project plus it has the technical and scientific capacity to act as the main EA. In addition, through its work with the CBP, and other programs with a related focus, UNEP has a solid foundation in sustainable land management in relation to climate change mitigation.

UNEP’s comparative advantage derives from its mandate to coordinate UN activities with regard to environment, including its convening power, its ability to engage with different stakeholders to develop innovative solutions and its capacity to transform these into policy- and implementation-relevant tools. UNEP’s comparative advantages in the GEF are also aligned with its mandate, functions and Medium Term Strategy and its biennial Programme of Work (2014- 2015). The proposed project is consistent with the Climate Change thematic priority outlined in UNEP’s Medium-term Strategy. It will contribute to achieving “Expected Accomplishment (b), in particular Programme of Work output 3.4: Fostering low carbon development, NAMAs and Technology Planning.” UNEP’s science and technical focus will bring comparative advantages as summarized in the following table:

Table A. UNEP’s comparative advantage

Areas of UNEP comparative advantage in the GEF (all Focal Areas)		UNEP Thematic Priority Areas					
		Climate Change	Disasters & conflicts	Ecosystems management	Environmental governance	Harmful substances & hazardous wastes	Resource efficiency
1. Sound science for national, regional and global decision-makers	Early warning and emerging issues	X					
	Science to Policy linkages	X					
	Environmental monitoring and assessment	X					
	Norms, standards, and guidelines	X					
	Enabling Activities for MEAs and synergies						

2. Cooperation, coordination and partnerships (regional or international)	Trans-boundary cooperation	X					
	Regional, or South-South cooperation	X					
	Global transformative actions	X					
3. Technical assistance and capacity building at country level (contribution to Bali Strategic Plan)	Technology assessment, demonstration, and innovation						
	Capacity building	X					
	Lifting barriers to market transformation						
4. Knowledge management, awareness raising and advocacy		X					

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

Global environmental problems, root causes and barriers that need to be addressed:

Emissions of greenhouse gases (GHGs) from agriculture, land use, land use change and forestry account for approximately 33% of all global GHG emissions with root causes being an increasing global demand for food and fibre coupled with unsustainable land management practices. It is therefore widely acknowledged that the way in which land is used and managed has a major role to play in the mitigation of global climate change.

Sustainable Land Management (SLM) has the potential not only reduce GHG emissions, by reducing emissions from biomass burning, biomass decomposition and the breakdown of soil organic matter (SOM), but also to sequester carbon (C) through practices that increase biomass production and promote the build-up of SOM. There are, therefore, substantial climate change co-benefits associated with SLM activities.

The Global Environment Facility (GEF) recognizes that carbon sequestration is a global environmental benefit in the context of climate change mitigation. GEF provides incremental funding for a wide range of SLM and NRM activities in developing countries from reforestation and agro-forestry projects, to projects that protect wetlands or foster sustainable farming methods. The carbon co-benefits of these and other non-GEF SLM projects are likely to be considerable. In addition, GEF has a mandate to report on global benefits to the relevant conventions, in this case the mandate is to report on C sequestration to the UNCCD.

One of the barriers to the assessment of global carbon benefits resulting from SLM is access to and application of suitable scientifically robust cost effective quantification tools which are easy to use for project level accounting in addition to well documented and harmonized datasets of SLM practices.

Baseline scenario and associated baseline projects:

Baseline scenario

The Global Environment Facility (GEF) has maintained a long-term interest in estimating the carbon benefits of the SLM activities it supports in order to understand the global carbon benefits that might be achieved by such activities. Such estimation would allow the GEF to surmise the global C impact of these activities and report this to the relevant conventions (UNFCCC, UNCCD etc.). This interest led to investment in the development of a suite of tools to measure, monitor and report on the impact of land management projects on carbon stock changes and greenhouse gas (GHG) emissions, through the GEF's Carbon Benefits Project (CBP) (www.unep.org/cbp_pim with more information available from <http://carbonbenefitsproject-compa.colostate.edu>). The tools include a Simple Assessment and a Detailed Assessment, which are both online tools based on the IPCC method. The Simple Assessment is suitable for a quick assessment at any stage, including proposals, utilizing pre-populated information on cropping, grassland and forestry systems. The Detailed Assessment is suitable for detailed reporting in projects with a reasonable focus on climate change mitigation and allows users to use their own country or project specific emission and stock change factors, leading to reduced uncertainty (e.g. a more precise and or accurate estimation).

The GEF Scientific and Technical Advisory Panel (STAP) recently reviewed the tools and reported that the Simple Assessment is suitable for use in GEF projects now and recommended further development of both the Simple and Detailed Assessment, providing several specific recommendations for enhancement. In addition, interest has been shown in comparing the GEF CBP tools with other available tools and developing a matrix, which matches scope, remit and geographic focus with SLM activity.

The baseline scenario would be as follows: Uptake of the CBP tools would continue in a limited ad-hoc way with no structured training events. Some uptake has occurred via the efforts of the CBP team working as consultants (IFAD project in Swaziland, WB project in Ethiopia, IUCN projects in Brazil) however continuity of reporting across GEF projects would not be achieved, making the estimation of global carbon benefits resulting from GEF investment in natural resource management difficult. Recommendations for the improvement of CBP tools which came out of a comprehensive GEF STAP review would not be implemented and significant opportunities to help GEF projects estimate carbon benefits and potentially link to carbon financing would be missed. Links to the WOCAT resources would not be made or would be very limited meaning GEF project managers using the CBP tools would not benefit from already available and growing information on good land management practices in a multitude of environments and be able to assess the carbon benefits. Links to new innovative systems which use mobile technologies and crowd based data collation would not be made and a major opportunity to update the way in which GEF projects are monitored would be missed. Also, confusion about which carbon and GHG accounting tools to use for specific purposes would persist.

Associated baseline projects

This project builds on a substantial baseline. The development of the CBP tools involved GEF and other investment of approximately US\$ 10,000,000. This project will capitalise on this investment to ensure consideration of C as a co-benefit in GEF and other SLM projects. In addition, existing and ongoing activities associated with this project represent a substantial baseline of funds. The Table below details these activities, the funds they represent and the incremental funding requested for this project from the GEF and co-financiers.

Project Component	Baseline	Alternative (Baseline + Increment)	Increment
1. Training and outreach for exiting tools	WB-CARE Climate-Smart Initiative, Phase II (included application of CBP tools to 25 government sites across Ethiopia) \$840,000 IFAD CBP training activities	Capacity to estimate C benefits of SLM significantly increased for the most significant stakeholder groups associated with the most	GEF \$540,000 Co-finance \$565,000 Total: US\$ 1,105,000

Project Component	Baseline	Alternative (Baseline + Increment)	Increment
	<p>\$25,000 plus an as yet unspecified amount to use the CBP tools across IFAD projects in SSA.</p> <p>WOCAT funding is equal to around Euro \$700,000 a year. Approximately half of this goes on training and outreach activities. Over the 3 year project period this will represent \$1,050,000</p> <p>The IPCC and many other national and international organisations (EU, US EPA etc.) fund the production of materials and carryout activities to increase capacity to prove C co-benefits resulting from SLM. Over \$100 million</p> <p>Efforts are underway to improve the capacity of many countries to quantify terrestrial carbon stocks and their dynamics with donor countries and multilateral financial institutions providing much of the support. Over \$ 100 million</p> <p>TOTAL:\$201,915,000</p>	<p>relevant international agencies.</p> <p>(Baseline + Increment) TOTAL:\$203,020,000</p>	
2. Enhancement of existing tools	<p>Many of the approaches and methods that underpin the CBP system include approaches and technologies either developed or under development at CSU. These will feed into component 2 and include the CBP modelling component (\$3,512,777), (GEFSOC Project (\$2 million), CALUU (\$220,000), ALU (\$250,000), Comet-VR (\$502,000) Total \$6,484,777</p> <p>WOCAT funding is equal to around Euro \$700,000 a year. Approximately half of</p>	<p>SLM and NRM projects using an updated tool set to identify appropriate C friendly practices track and report them once implemented and engage with C finance schemes where appropriate.</p> <p>(Baseline + Increment) TOTAL: \$8,617,649</p>	<p>GEF \$644,800 Co-finance \$438,072 Total: US\$ 1,082,872</p>

Project Component	Baseline	Alternative (Baseline + Increment)	Increment
	<p>this goes on maintaining and enhancing existing tools. Over the 3 year project period this will represent \$1,050,000</p> <p>TOTAL: \$7,534,777</p>		
3. Comparative analysis of C accounting tools for SLM	<p>Several agencies have already invested in reviews and analysis of different tools for GHG accounting with different geographic focus and criteria on which this project will build. CCAFS – \$15,000 FAO/IRD – \$35,000 WB Carbon Foot-printing of ARD Projects \$622,956 GHG Analysis at the WB \$ 343,363 USDA - Unspecified However none of these have been aimed specifically at GEF projects, addressing both the needs of the projects and the performance of the tools.</p> <p>TOTAL:\$1,016,319</p>	<p>GEF and other managers of SLM projects have enhanced understanding of the wide range of tools available (outside of and including the CBP tools) and their application contexts.</p> <p>(Baseline + Increment) TOTAL: \$2,016,319</p>	<p>GEF \$500,000 Co-finance \$500,000 Total: US\$ 1,000,000</p>
4. Project Management			<p>GEF \$120,000 Co-finance \$58,440 Total: \$178,440</p>
TOTAL	<p>Baseline: \$210,466,096</p>	<p>Alternative: \$213,653,968</p>	<p>Incremental costs: \$3,366,312</p>

The Proposed Alternative:

The proposed alternative is a situation where;

- GEF and other project managers are equipped to measure monitor and report on the C benefits of SLM activities both in the long and the short term using existing tools developed with GEF investment;
- These existing tools are enhanced to specifically align with the requirements of selected C finance schemes allowing those projects that wish to easily access C finance.
- Existing CBP tools for tracking and reporting C project scale C benefits are linked to tools providing information on suitable land management practices (WOCAT) for given geographic areas allowing users to make better decisions when developing land management strategies.
- Tools for tracking and reporting C benefits are linked to land management decision systems which collate data from mobile phone and cloud computing technologies allowing rapid low costs data collection with multiple uses.

- Clear direction exists on which C and GHG accounting tools to use in given circumstances and locations.

This will be achieved through a medium sized project which will capitalize on exiting GEF investment and further enable GEF and other SLM projects to realise the climate change co-benefits of sustainable land management.

The project would comprise of three components. Figure 1 gives a high level over view of the components, their outcomes and the intended change that would be effected by the project.

COMPONENT 1 - Training and outreach

During the Carbon Benefits Project (2009 - 2013) more than 100 people from Africa, Asia, Europe and Central and South America were trained to use the Simple Assessment, Cost Benefit Analysis and DPSIR (social analysis). This was in addition to personnel from the four GEF projects in Kenya, Niger/Nigeria and China and one non-GEF project in Brazil which helped to develop the system. Training workshops were held in China, Malaysia, Brazil and Kenya. Each event ran at full capacity with participants from all over the three continents and many interested participants had to be turned away. Since the end of the project, further training events have been held in Swaziland (funded by an IFAD project) and Ethiopia (funded by a World Bank Project) training a further 85 people. The interest from GEF projects and government personnel involved in SLM activities is high. CSU staff have had requests to carry out training events in Argentina, Ethiopia (in addition to those already held there) and Italy in addition to numerous request from individuals. CSU staff are currently responding to some of these requests with their time unfunded, however this severely limits the number of requests that can be responded to. The organizations requesting training have all articulated that they are willing to meet the costs of holding the training events but cannot pay for trainers time. If GEF funds could be used to do this it would represent great value for money.

The tools have now been used to run scenarios for land management activities in 212 countries. In addition, several of the GEF agencies (UNDP, IFAD, FAO, and ADB) have begun using or communicated an interest in using the tools and sending personnel to training events. The tools have been used by personnel from a newly approved GEF agency (IUCN) and large NGO's such as CARE International. The CBP tools are currently available in five languages with plans to add more in the future. The CBP system is designed in such a way that capacity to rapidly add new language translations to the toolkit is very high. The total level of effort requires less than 8 hours involving a bilingual person experienced in natural resource management or greenhouse gas accounting and less than 1 hour for CSU staff to add the new language.

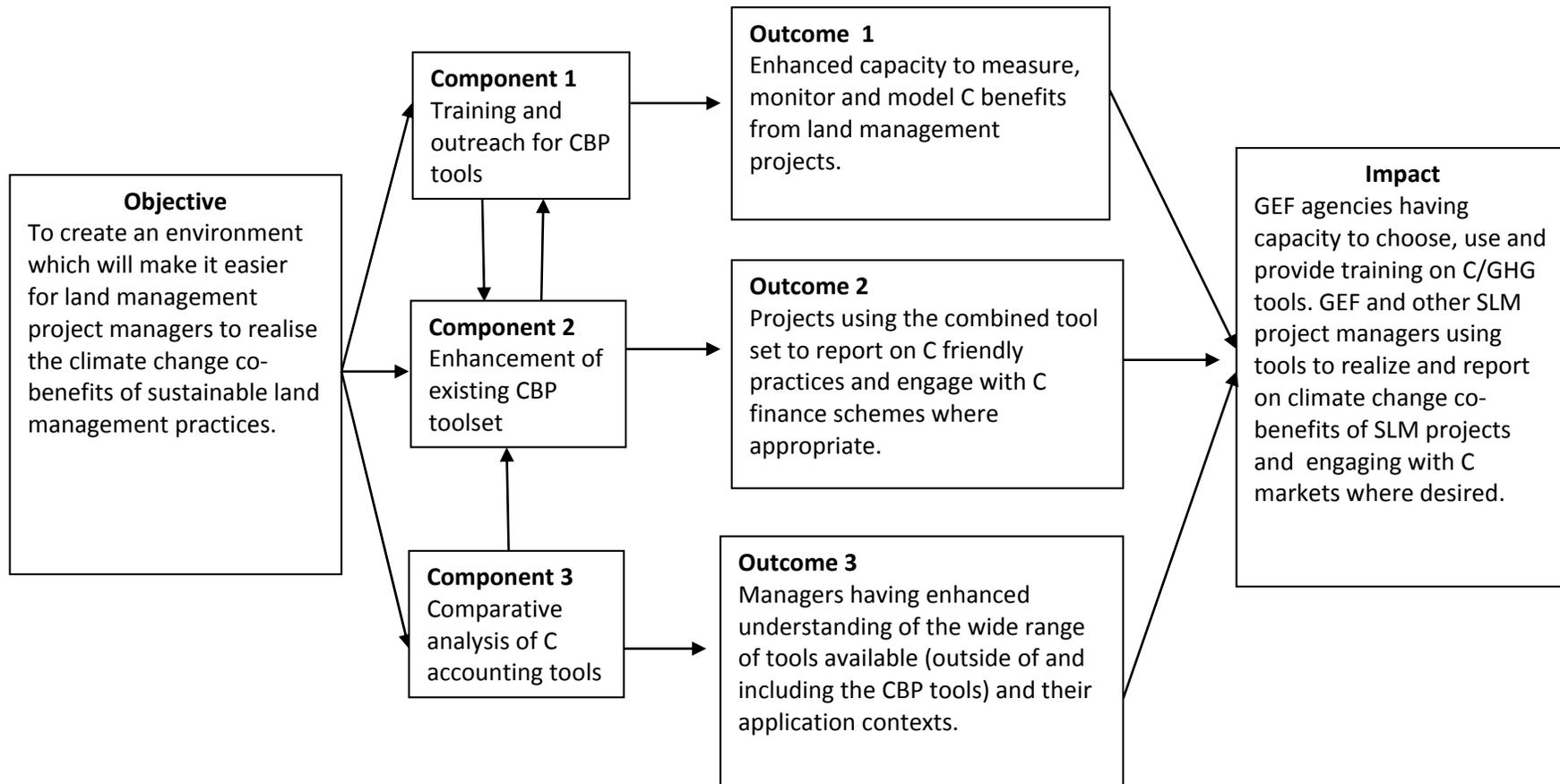
Training on WOCAT tools for sharing best SLM practices, assessing their impacts and using this knowledge for decision making has taken place in over 50 countries world-wide and a large global database has been built up. WOCAT has a track record for attractive and user-friendly presentation of land management option and for training in compiling this knowledge. It has also developed a methodology for participatory multi-stakeholder workshops to use this knowledge for local and regional decision making.

Component 1 will have 2 parts:

Part 1 will hold at least 5 training events with ~ 30 participants at each with representation from individual projects limited to 2 people. Participants will be GEF project managers and GEF and GEF agency personnel. Support will be provided by email after the training events, but no onsite work will be carried out with these projects. The target will be to train people from 40 different projects and/or organizations. These events will be hosted by GEF and other agencies who have already committed to act as host or expressed interest. This project will only cover the costs of the trainers.

Part 2 will work in depth collaboratively with 5 GEF projects (details provided below) providing on site guidance and support over the 3 year period.

Figure 1: Overview diagram of SLM CCMC project



Part 1 Training Events

The project will hold 5 training events for GEF project managers and GEF personnel over a three year period. These events will train about 30 people each. At each event participants will be given basic background on the impacts of land use and management on climate change mitigation. This will involve training on the following:

- How to use tools to choose geographically specific land management strategies;
- Devising appropriate plans for monitoring and reporting C benefits both during project implementation and ex-post after project completion;
- Using the CBP toolkit to provide input for a project proposal, to monitor track and report C benefits during the project lifetime AND continue with a monitoring plan post project implementation. The CBP tool kit is unique as it provides a range of options with different data demands which can be used during a project and ex-post when resources for data collection may be more limited.
- Using tools to analyse the socioeconomic implications of C friendly land management strategies using the DPSIR and Cost Benefit tools.

Target groups will be GEF project managers from geographical areas not covered by previous training events (West Africa, Southern Africa, Central America, Eurasia and the Indian sub-continent,) and personnel from GEF agencies (UNDP, IFAD, FAO, ADB and IUCN). The second group will receive training with the aim of positioning them to train others in the future. This will include development of more training materials (course packages, online demonstration videos, further exercises and tutorials etc.) which could easily be used by others for training purposes. Selection for training will be gender sensitive so that both genders will be fully represented and positioned to fully benefit from use of the tools.

A provisional timetable for Comp 1 Part 1 training is given below, however the project will also respond to training requests as they come in so this schedule is provisional. Options for an event in India are being explored.

Event	Trainees from	Location	Year	Month
UNEP/WB project hosted training session	-Grand Chaco Project -Andean Ecosystem Project -Rio Grande do Sul Project -UNEP/GEF staff -WB/GEF staff -South/Central America project managers	Argentina	1	4
IFAD hosted training session	-CBINReMP Project -IFAD staff -IFAD/GEF project managers	Rome, Italy	1	8
UNDP hosted training session	-SLM SA Project -UNDP staff - Southern African GEF project managers	South Africa	2	3
UNEP hosted training session	-UNEP staff -GEF program officers -West African GEF project managers	Kenya	2	8
IUCN/UNDP hosted TBC	Eurasian GEF project managers	Eastern Europe	3	3

Part 2 In-depth work with 5 GEF projects

In a separate activity, this project will work closely with five GEF projects from four GEF agencies (UNEP, IFAD, UNDP, WB) to fully implement the CBP Modelling tools and help them devise realistic strategies to continue monitoring C Benefits in the long term after project completion. The projects are:

- The Community-Based Integrated Natural Resources Management Project (CBINReMP) in Ethiopia, GEF agency **IFAD**, GEF project ID 3367.
- Multiplying Environmental and Carbon Benefits in High Andean Ecosystems, and its correspondence (Ecuador and Peru), GEF agency **UNEP**, GEF project ID GFL-5060-2711-4C61.
- Scaling up Sustainable Land Management and Agrobiodiversity Conservation to Reduce Environmental Degradation in Small Scale Agriculture in Western Kenya. GEFSEC ID 5272. GEF agency **UNEP**. GEFSEC ID 5272.
- Securing multiple ecosystems benefit through SLM in the productive but degraded landscapes of South Africa. GEF agency **UNDP**. GEF Project ID 5327.
- Rio Grande do Sul Biodiversity. ID GE-P086341-SPN-TF018171. GEF Agency **World Bank**. The objective of the project is to advance the conservation and restoration of biodiversity in the State's grassland ecosystem through integrating biodiversity conservation within the productive landscape.

These GEF projects are committed to using the CBP Simple or Detailed Assessment (support letters are provided in the annex) . This project will work with them to implement appropriate C reporting strategies using the CBP tools. Over the 3 years, these projects will receive initial training on the CBP modelling tools, assistance with assembling and analysing activity data (land use/management information) for the Baseline Situation (termed 'Initial Land Use' in the CBP), help developing baseline and project scenarios for a specific report period and advise on field sampling activities to develop project specific stock change and emission factors if using the Detailed Assessment. This support and training over the three year period would ensure the tools are fully implemented in these projects and progress is tracked during the project lifetime. In addition those projects wishing to link to C finance opportunities will be given guidance on appropriate use of the tools to help them do this. GEF agency staff will be kept informed of implementation of the tools and feedback provided at each stage so the projects can provide lessons learned and best practice for future projects. This will include consideration of reporting requirements specific to each agency.

Specific activities with these 5 projects will include:

- An initial site visit to the projects to determine the approach to take and tools to use, to identify key staff and to provide training (to be tied in with the wider training events detailed above where possible)
- Monthly SKYPE meetings with project staff to provide guidance, technical help using the tools and feedback
- Feedback on reports produced by the CBP system and analysis of results
- A second site visit at the end of the 2nd/start of the 3rd year to discuss progress and produce long term monitoring plans.

At the same time we will take the opportunity to document the SLM practices employed by these 5 projects and provide training on the WOCAT tools where relevant. We will also work with the Land Potential Knowledge System (LandPKS) (Herrick et al. 2013) to trial some of their mobile data gathering tools to work towards integration with the CBP.

Component 1 Outcome:

Outcome 1.1: Enhanced capacity to measure, monitor and model carbon benefits resulting from GEF land management projects both *ex ante* and *ex post* in several GEF agencies (UNEP, UNDP, IFAD, FAO, ADB) and GEF for project personnel.

Implementation of the CBP's Simple or Detailed Assessment in 5 GEF projects.

Enhanced capacity to document good/best land management practices linked to the CBP assessment for 5 GEF projects.

Component 1 Outputs:

1.1 Assessments of C benefits made using the Simple and Detailed Assessments for GEF and non-GEF projects involved in training sessions (Part 1).

1.2 Documentation of good/best practice land management practices in terms of C benefits.

1.3 In depth implementation of the CBP's Simple or Detailed Assessment in the 5 GEF projects with the on-going support of the SLM CCMC (Part 2).

1.4 Project managers trained to document good/best land management practices, linked to CBP assessment for 5 GEF projects

COMPONENT 2 Enhancement of existing tools

Partners will include – Colorado State University (CSU), World Overview of Conservation Approaches and Technologies (WOCAT). Co-funding - CSU, WOCAT.

This component would comprise of two parts which would lead to the enhancement of the GEF CBP Modelling Tools developed with prior GEF investment. The first part would directly address GEF STAP recommendations supplied during the evaluation of the CBP modelling tools to further develop the existing tools. The second part would make direct links between the CBP modelling tools and existing tools and database of WOCAT, a global initiative and network related to documentation, assessment and sharing of SLM.

Part 1: In the GEF Scientific and Technical Advisory Panel (STAP) evaluation of the CBP tools, a number of enhancements were recommended for the Simple (analogous to an IPCC Tier I assessment) and the Detailed Assessment (analogous to an IPCC Tier II assessment). These were aimed at addressing the changing needs of GEF projects, taking advantage of new technologies and linking with other initiatives. The enhancements include those suggested by STAP and some additional enhancements.

The following enhancements will be made:

(1) Develop a global database of region-specific factor values provided by users of the Detailed Assessment (linking in with the Emissions Factor database of the IPCC).

One of the attractive features of the CBP tools is they allow users to either use default information on how land management practices may affect carbon stock changes and GHG emissions (by using 'emission factors' provided by the IPCC) or users can enter their own region/country or project specific factors instead. This is advantageous as often factors provided by the IPCC are much generalised across very broad climatic regions and soil types. Currently specific factors entered into the Detailed Assessment are only accessible to the user who entered them. We will add an optional feature to collect these emission and stock change factors, along with appropriate

documentation on their derivation, and make them accessible to future users working in similar systems. In addition we will develop a link to the IPCC Emissions Factor Data Base to access these factors as well.

(2) Enhance the reports produced by the CBP assessments

The CBP currently produces a summary report which is a PDF document and a detailed report which is an Excel file. Both will be enhanced and reorganised to include more graphical representation of outputs, easier navigation in the Detailed Report and as far as possible alignment with the individual needs of GEF implementing agencies as well as the GEF.

(3) Add functionality to deal with leakage and permanence.

Mapping functions in the CBP description module allow for leakage management zones to be designated, more guidance and functionality will be added.

(4) Add guidance and features to highlight how the Detailed Assessment could be used in carbon markets and certification schemes.

This would include working with registration schemes such as the Verified Carbon Standard (VCS) with the aim of ultimately gaining scheme approval. Other verification standards could also be included as the GEF and implementing agencies deem necessary. This work would be linked closely to the outreach part of Component 1. Working with test case projects to meet the requirements of C certification schemes where the project is interested in doing so.

(5) Add extra features to enhance the mapping tools in the CBP system

This would include adding functions to open (where available) cadastral layers that could be selected as polygons (project or parcel boundaries). This will enable viewing of coordinates in more parts of the system and enhancing polygon drawing features.

(6) Add further options for forestland calculations

Sections would be added in the guidance module to help identify those projects which are primarily forestry projects and these projects would be steered to more detailed options for data input. For example we would improve the tools to better describe reforestation and deforestation events through time.

(7) In addition to enhancement of the CBP tool a reporting database will be developed for UNEP GEF staff to use to access, store and analyse reports generated by the CBP system. This will allow them to access and analyse multiple CBP reports accompanying proposal documents, active projects and completed projects.

Part 2: WOCAT and LADA are already working to link their two toolsets together. The addition of comprehensive standardized tools to assess carbon benefits (such as those developed by the CBP modelling component) would provide great additional value and capitalise on previous GEF investment. UNCCD support for this initiative was sought (and provided) during the Project Preparation phase. UNCCD will be involved in this component's meetings to ensure compatibility with UNCCD requirements.

The following activities are proposed to further link and integrate WOCAT and the Carbon Benefits Project Modelling Tools:

- 1) Develop a user-friendly interface between the SLM technology database of WOCAT and the CBP tools (Simple / Detailed Assessment) and adjust the tools to minimize overlap of data acquisition and maximize synergies in assessing C/GHG impacts and associated benefits of SLM.
- 2) Develop a link between the CBP Simple/Detailed Assessment and WOCAT which allows users to run the Simple Assessment or Detailed Assessment for specified management practices in a selection of areas and generate estimated C/GHG impacts.
- 3) For the Simple Assessment Use WOCAT SLM technology database information to expand the list of pre-populated options of cropping, grassland and forest land systems.
- 4) For the Detailed Assessment a specific Carbon Benefit module linked to the WOCAT database to collect additional information needed for a detailed assessment
- 5) Use and further populate the WOCAT SLM technology online database to make predictions of above and below ground C stock changes/GHG emissions at the field/plot level. Use existing and newly generated data from the 5 GEF pilot projects and WOCAT projects in Ethiopia and Tajikistan to validate the CBP model estimations.
- 6) Use/ build upon WOCAT to add a section to the CBP Guidance module on location, appropriate C friendly sustainable land management practices and associated carbon impacts.

Component 2 Outcome:

2.1 SLM and NRM projects using the combined tool set to identify appropriate C friendly practices track and report them once implemented and engage with C finance schemes where appropriate.

Component 2 Outputs:

2.1 An enhanced toolset with increased efficacy in terms of spatial data and accessibility as well as direct relevance to specific finance/certification schemes

2.2 An interlink between the CBP and WOCAT tools

2.3 A reporting database for UNEP GEF staff to use to access, store and analyse reports generated by the CBP system.

COMPONENT 3. Comparative analysis of carbon accounting tools for sustainable land management

Partners - World Bank (lead agency), Eco&Sols, UNEP, CSU. Co-financing - World Bank, Eco&Sols

CONTEXT

Sustainable land management (SLM) entails the implementation of land use systems and management practices that enable humans to maximize the economic and social benefits from land whilst maintaining or enhancing the ecosystem services from land resources. Amongst natural resources management interventions, SLM stands out as a key to increase food security, enhance resilience of ecosystems, and mitigate climate change.

SLM delivers global carbon benefits in three important ways. The first is carbon conservation, in which the large volumes of carbon stored in natural forests, grasslands, and wetlands, remain stored as carbon stocks. Conserving this terrestrial carbon represents a “least-cost opportunity” in terms of climate change adaptation and mitigation, and is essential to increasing the resilience of ecosystems. The second benefit is carbon sequestration, in which the growth of agricultural and natural biomass actively removes carbon from the atmosphere and stores it in soil and biomass. The third benefit delivered by SLM is reduction in emissions of greenhouse gases that emanate from agricultural production and land-use change.

The CBP Modelling Tools provide just one example of GHG accounting tools with numerous options available for single commodity or single land use analysis, analysis at different scales or in specific geographical regions, or for specific purposes (e.g. for certification with particular schemes). In addition some tools are for straightforward accounting whilst others allow a comparison of a baseline with a project scenario. There is, therefore, a need for clear and comprehensive guidance to help the managers of GEF and other SLM projects choose the most appropriate tool for the job.

The World Bank is well-positioned and has a comparative advantage to assess the effectiveness and efficiency of carbon footprint tools. It is increasingly looking to assess the greenhouse gas footprint of its investment lending across sectors. This is aimed at understanding the portfolio footprint of the Bank’s projects relative to development goals. Good progress has been achieved in reviewing, developing and testing a range of greenhouse gas analysis methodologies and tools across energy, transportation, and forestry sectors. Similarly, a number of tools have been developed to assess/quantify agricultural sector greenhouse gases, and are constantly under refinement. Many of these tools have their own drawbacks, in particular when it comes to their applicability in the developing country context, where there is a lack of robust field data and emission factors. Tools and methodologies that are simple, user-friendly, efficient and comparable are required for GEF and other SLM project designers and managers in mainstreaming greenhouse gas footprinting into development operations.

This study would pilot and compare several greenhouse gas assessment tools in SLM projects across the Bank/GEF regions. It builds on earlier efforts to test tools in assessing the carbon footprint of World Bank projects^{5 6}. The study, proposed under Component 3, will answer questions such as:

What carbon assessment tools are available?

Under what conditions are they best applicable for assessing SLM GHG footprint; and

How is the carbon assessment carried out?

The overall goal of Component 3 is to develop a resource that could be used by GEF and other natural resource project managers to familiarize them with the available GHG tools and their advantages and disadvantages. The end product would be practical manual with several case studies that outline activities of the projects that

⁵ World Bank (2012a). Carbon foot-printing of ARD Projects: Testing the Ex-Ante Carbon Balance Appraisal Tool (EX-ACT), world Bank, Washington DC.

⁶ World Bank (2012b). Greenhouse gas analysis at the World Bank (http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/04/18/000333037_20130418122501/Rendered/PDF/697110P11055700as0Analysis00PUBLIC0.pdf)

contribute to emissions and sequestration, and the net emissions from project activities. The work would be conducted in collaboration with UNEP (as the implementing agency), Colorado State University and Eco&Sols.

Colorado State University have lead two major reviews of GHG accounting tools (Denef et al., 2011, Milne *et al.* 2012 & 2013). Milne *et al.* (2012), focused specifically on tools which are suitable for landscape scale assessments in developing country areas dominated by smallholders (with relevance to many GEF projects). Eco&Sols/FAO led another major review (Colomb et al. 2013) and have developed a prototype decision tree which can point users to the most appropriate tool. FAO are currently now working to develop this further into a dynamic application which runs in Excel (Bernoux, pers. com). Eco&Sols are also responsible for the development of the EXACT tool.

DESCRIPTION OF ACTIVITIES

This work will pilot and compare the use of the relevant GHG assessment tools across several geographic regions to assess the GHG footprint of SLM operations. The potential assessment tools to be tested include:

CBP SA and DA (Carbon Benefits Project Simple and Detailed Assessment tools developed by the GEF-funded “Carbon Benefits Project”)

CAT-AR (Carbon Assessment Tool for Afforestation and Reforestation)

CAT-SFM (Carbon Assessment Tool for Sustainable Forest Management)

EX-ACT (EX Ante Carbon-balance Tool)

Forest Carbon Calculator

Soil Carbon Sequestration Webtool of the World Bank

DeNitrification-DeComposition Model (DNDC)

Tool for Afforestation and Reforestation Approved Methodologies (TARAM)

Agence Française de Développement (AFD) Carbon Footprint Tool

Cool Farm Tool

GHG balance appraisal using each tool will comprise of the following:

Project data collection and organization

Quantitative estimation of current land use together with land-use changes in the “without project” and “with project” scenarios, with description of the relevant farming systems, livestock production, input use, and other project investments;

Description and quantitative estimation of land management options which will be promoted within every sub-sector (forests, cropland, grasslands, etc.)

Estimation of project GHG balance

Description of the scenarios, analysis of the results, and economic analysis

The tools will be evaluated on the basis of simplicity, transparency, harmonization, and credibility principles⁷. *Simple*, in terms of assessment time and/or resources and application by project task teams; *Transparent*, in terms of being objective and clear about methodological choices and assumptions; *Harmonized*, in terms of alignment with tried and tested approaches; *Credible*, in terms of the robustness of analytical underpinning, which is also linked to the other three principles.

⁷ Based on World Bank (2012b), *Simple*, in terms of assessment time and/or resources and application by project task teams; *Transparent*, in terms of being objective and clear about methodological choices and assumptions; *Harmonized*, in terms of alignment with tried and tested approaches, including those used by other IFIs; *Credible*, in terms of the robustness of analytical underpinning, which is also linked to the other three principles.

The following criteria will be used to make detailed assessment:

- Geographic context
- Scientific validity
- Data requirements
- Geographic boundary
- Treatment of leakage
- Activities considered
- The type of greenhouse gases the tool can assess
- Baseline
- User friendliness
- Cost-effectiveness
- Time frame
- Outputs

The assessment will also undertake a mapping of the different carbon accounting tools with the wide range of potential carbon sequestration activities (see Table 1 below for a typology of activities).

Table 1: Typologies of practices that sequester carbon in Forest, Grassland and Cropland

Forest	Grassland	Cropland
Protection of existing forests – Avoided deforestation preserves existing soil C stocks and prevents emissions associated with biomass burning and soil exposure by land clearing	Improved grassland management – Optimize stocking rates to reduce land degradation, depletion of soil organic carbon and methane emissions through enteric fermentation	No or reduced tillage – Reduces the accelerated decomposition of organic matter associated with intensive (conventional or traditional) tillage.
Reforestation – Increasing tree density in degraded forests increase carbon accumulation	Introduction of improved pasture species and legumes to increase above and below ground biomass production and soil organic carbon accumulation	Mulching/residue management – Improves soil moisture prevents soil erosion, and increases soil organic matter when incorporated into the soil. Crop residues also prevent loss of carbon from the soil system
Afforestation – Establishment of new forests on non-forest land (cropland, grassland or degraded lands) increases carbon stock through the increase in above-ground biomass as well as greater organic materials input for soil decomposition.	Application of inorganic fertilizers and manure to stimulate biomass production. Chemical fertilizers are however less environmentally friendly due to nitrous oxide (N ₂ O) emissions associated with N fertilizers, the greenhouse cost of fertilizer production and emissions associated with transport of fertilizers	Application of inorganic fertilizers and manure to stimulate biomass production. Chemical fertilizers are however less environmentally friendly due to nitrous oxide (N ₂ O) emissions associated with N fertilizers, the greenhouse cost of fertilizer production and emissions associated with transport of fertilizers
	Water management to increase productivity, but this has to be put in the perspective of emissions associated with the process of irrigation.	Use of cover crops/green manure increases the biomass returned to the soil and thus increases soil carbon stock.
	Introduction of earthworms to improve aeration and aid organic matter decomposition in the soil profile.	Use of improved crop varieties – Improved crop varieties helps to sequester carbon in the soil through increased above and below ground biomass production
	Establishment of pasture on degraded land reintroduces large amounts of organic matter into the soil	Agroforestry/tree-crop farming – Introduction of fruit trees, orchards and woodlots into croplands helps to store more carbon, optimize water use,

		diversify production and increase income.
		Introduction of improved crop varieties
		Application of biochar and other soil amendments

Source: World Bank 2012c⁸

Table 2: Potential Bank Projects for the Analysis

NO.	POTENTIAL PROJECTS TO BE ASSESSED	REGION
1	Sustainable Agriculture And Climate Change Mitigation Project	Uzbekistan (ECA)
2	Forestry And Conservation Project	EAP (Pacific Islands)
3	Chimborazo Natural Resources Management Project	LCR (Ecuador)
4	TUN GEF Second Natural Resources Management	MNA (Tunisia)
5	Shanghai Agricultural and Non-point Pollution Reduction Project	EAP (China)
6	BR GEF Rio Grande do Sul Biodiversity	LCR (Brazil)
7	Nigeria Erosion and Watershed Management Project	AFR (Nigeria)
8	Community-based Sustainable Land Management Project	AFR (Senegal)
9	Natural Resources Management In A Changing Climate In Mali	AFR (Mali)
10	Sustainable Land Management Project	LCR (Chile)
11	Caatinga Conservation and Management - Mata Branca	LCR (Brazil)
12	Integrated Ecosystem Management in the Jordan Rift Valley	MNA (Jordan)
13	Neeranchal National Watershed Project	SAR (India)
14	Sustainable Land Management Project	AFR (Ethiopia)
15	Community-based Sustainable Land Management Project	AFR (Senegal)
16	REDD Congo Basin	ARF (DRC)
17	Sustainable Development in Poor Rural Areas	EAP (China)
18	Morocco Social and Integrated Agriculture	MNA (Morocco)
19	SLM for CC Adaptation and Mitigation	World
20	Land Management - Partnership	AFR (Kenya)
21	Afforestation & Reforestation of Refused Lands in Albania BioCarbon Fund Project	ECA (Albania)
22	Moldova Agriculture Competitiveness Project	ECA (Moldova)

EXPECTED RESULTS

Component 3 Outcome:

3.1 GEF and other managers of SLM projects have enhanced understanding of the wide range of tools available (outside of and including the CBP tools) and their application contexts.

Component 3 Outputs:

⁸ World Bank (2012c). Carbon Sequestration in Agricultural Soils Report Number 67395 – GLB (http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/05/18/000333038_20120518003322/Rendered/PDF/673950REVISED000CarbonSeq0Web0final.pdf).

3.1 A practical manual with case studies of the appraisals performed, and would include analysis based on the characteristics listed above (e.g. advantages and shortcomings each tool, along with an assessment of its effectiveness). Ratings of the tools may also be provided as well as conditions in which they are most suited for carbon assessment. A Guidance Note for conducting greenhouse gas (GHG) emission for SLM operations will also be provided.

3.2 A 60-minute internet-based training module (e-learning) on “GHG accounting for SLM operations” This module will be carefully designed to facilitate peer learning amongst GEF managers and global knowledge sharing amongst natural resource managers.

DISSEMINATION STRATEGY

Component 1

The training sessions scheduled for Component 1 will have an outreach component aimed at raising awareness of the tools. At each of the training sessions the first half day will be a dissemination day to raise awareness of the tools and the project itself. This will be open to trainees and non-trainees alike, targeting local NGOs, universities, government personnel and press. This strategy worked well during the GEF SOC project and served to heighten awareness of the project. Feedback from each training session will go to relevant GEF agency staff.

The project will seek to disseminate results at UNCCD and UNFCCC meetings through side events where possible. In order to keep costs down the possibility of having training events in the same location and time as UN meetings will be explored.

Component 2

The CBP tools are already freely available online at http://www.unep.org/cbp_pim/. It has a wide user group with analyses having been run for land management scenarios in 212 countries to date. As new features are added or changes are made notices are put up on the website and messages posted on the tools user group. In this project, changes made will also be announced on social media (Facebook and Twitter) and notifications will be sent to relevant GEF agencies.

In addition CSU has a website providing background information about the tools at <http://carbonbenefitsproject-compa.colostate.edu/>. An ‘updates’ page will be added to this website detailing changes to the system and linking to other resources such as the IPCC EF data base when appropriate. The team at CSU regularly take part in high profile scientific conferences. The enhanced CBP tools and examples of their application will be presented at these conferences and meetings wherever possible. Since the end of the Carbon Benefits Project the team have continued to present the tools at conferences with the most recent presentation scheduled at the EU Development Days <http://eudevdays.eu/>. Findings detailed application of the tools in the 5 GEF projects will also be submitted for publication in peer reviewed journals.

Component 3

The Component 3 report will be made available to GEF, GEF Agencies, donors, the regions and the wider public through the internet. The report will also be distributed to country clients – ministries of agriculture and environment, and also presented in relevant conferences and symposia.

All components

Relevant output will be sent to climate change focal agencies in those countries involved in the project to allow output to be considered in country NAMAs and biennial reports.

COMPONENT 4. Project Management

The project will be coordinated by UNEP DEWA (the EA) who will allocate a project coordinator to liaise with UNEP, DEPI (the IA) who will in turn liaise with GEF. Colorado State University be responsible for Components 1 and 2 and will employ an independent consultant with previous experience of managing a GEF MSP and another GEF FSP on related topics to coordinate these 2 components. The CSU coordinator will be responsible for the day to day running of components 1 and 2 including all scientific and financial reporting. All partners associated with Components 1 and 2 will report to the CSU coordinator who will in turn report to UNEP DEWA. Component 3 will be coordinated by the World Bank who will report to UNEP DEWA. A project steering committee comprised of one senior member of each project partner will steer the project and review all products and outputs before final release. The project monitoring and evaluation plan is detailed in Section C.

A.5. Incremental/Additional costs reasoning: 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:

This project builds on previous GEF investment in the development of a set of tools to measure, monitor and model carbon stock changes and GHG emissions under the Carbon Benefits Project. GEF investment in this project was GEF: US\$ 5,526,265 with co-financing of approximately US\$ 3,000,000. In addition there has been investment in the use of the tools by IFAD ~\$30,000, the World Bank through a CARE project in Ethiopia ~\$101,700. This gives a baseline of at least ~\$8,657,965. In addition there has been in-kind investment in the CBP tools by UNDP. The alternative cost reasoning (baseline plus the increment) would be \$11,957,965 with an increment of \$3,300,000 from GEF and co-financers. Additionally, the project builds on investments made through the WOCAT programme and network partners for the past 21 years. The proposed project capitalizes on the developed tools and databases. The GEF resources are required to maximize the returns on these investments through increased uptake and application of the carbon benefit tools so that sustainable land management co-benefits can be realized.

Global environmental benefits

All of the activities in this project are aimed at enabling land managers to realize the climate change co-benefits of sustainable land management and natural resource management practices; by helping to estimate the carbon/GHG impacts and additional benefits of geographically specific land management practices, by improving accessibility to accounting options for specific purposes and by building capacity. In turn this will contribute to increased global climate change mitigation benefits through sustainable land management. The CBP tools, which will be used in components 1 and 2 of the project, are compatible with the Agriculture and Land Use (ALU) national scale inventory tool which is already being used by many developing countries. Use of the CBP tool in SLM and NRM projects will provide valuable information that can feed into national GHG inventories for the agriculture and land use sector. This in turn will lead to a better understanding of GHG fluxes globally aiding global action on climate change mitigation.

Innovativeness, sustainability and potential for scaling up

Innovativeness

Many aspects of the project are innovative. The project will deliver the first example of a globally applicable online GHG accounting tool-set linked to a global database of geographically appropriate sustainable land management practices (WOCAT). This will help realize the project objective of creating an environment which will make it easier for land managers to realize the climate change co-benefits of sustainable land management practices. In addition, several of the enhancements suggested by GEF STAP (which will be implemented in Component 2) are highly innovative and synergetic. For example where available the project will provide region-specific emissions and stock change factor values in a global database and develop links (automated if possible) to the IPCC Emission Factor (EF) database. Currently any emission or stock change factors developed in project

scale accounting tend to remain with the institutions which developed them, meaning efforts can be duplicated and resources wasted. In addition, the project will add a function to the tool set to allow users to access (where available) cadastral layers that could be selected as polygons (project or parcel boundaries).

The project will explore ways of linking to LandPKS, which utilizes highly innovative data collating techniques (including crowd sourcing) using mobile phone technology.

Component 3 is innovative as it will provide the first attempt to review the relevance of existing GHG accounting tools to the specific needs of GEF SLM project managers.

Sustainability

Component 1 will deliver training which will not only enable participants to use the CBP tools to make assessments of carbon benefits, but will also put them in a position to train others. Through these activities the project will develop a sustainable network of personnel in GEF projects and GEF agencies who can continually pass on the necessary expertise to estimate carbon benefits in land management projects. In addition, WOCAT has a strong existing training programme in which the CBP tools will be incorporated ensuring the sustainability of the linked toolset. Furthermore WOCAT is designed as a long-term programme, supporting UNCCD and other conventions, GEF and non-GEF funded projects (e.g. WB, IFAD, ADB, AU and GIZ). The involvement of multiple GEF agencies in the project is specifically designed to encourage longer term support of the tools by the agencies through the development of longer term training programs (with agency personnel becoming the trainers). The development of more training materials (course packages, online demonstration videos, further exercises and tutorials etc.) will also lessen the need for face to face training in the future making use of the simpler tools self-sustaining.

Potential for scaling-up

Component 1 of the project will specifically scale up use of tools developed in a previous project co-financed by the GEF - The Carbon Benefits Project (CBP). Through this project scaling up will occur in countries and regions which have previously not received training in the tools and are perhaps unaware of them. In addition during the project use of the CBP tools will be scaled up to WOCAT project countries. There is also great potential for further scaling up after the end of this project through the network of trainers it will create. The existing tools are already available in five languages and more will be added during this project. This will further facilitate use in a wide range of countries. The GEF agencies involved in the project deal with a wide range of countries and their involvement in this project is aimed at promoting use of the toolset as widely as possible.

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:

Risk	Rating	Risk Mitigation Strategy
1, Data sharing between GEF/SLM projects and publically available databases such as WOCAT/ IPCC EF could be viewed as a problem by project managers.	M	In the current CBP system all information entered is password protected and can only be accessed by the information providers (password holders) and the system administrators. It is not shared with other users of the tool or third parties. This set-up will be maintained with users having the option to share part of their data with the other linked tools ONLY if they want to and on the understanding that this information will then be in databases which can be accessed by others. This will be clearly stated in the CBP system and users will have to agree to specify terms before any data is transferred to WOCAT or other linked systems.

2. Scheduling conflicts between multiple partners and agencies.	M	The project will involve multiple GEF agencies and other partners. Scheduling of events, particularly training events which are to be tied to UN meetings where possible, may prove problematic. Mitigation strategy; To schedule all training events as quickly as possible after project inception and get agreement from all parties involved.
3. Integration between components.	L	The project has 3 components which are included in the project to meet specific suggestions from the GEF. They will work in parallel. Component 1 can start training activities immediately as all the tools are already in place, having been developed under a previous project. The project will ensure that enhancements developed in Component 2 are covered in training events as they become available. In addition Component 3 will simultaneously compare different models and calculators and identify suitable circumstances for the use of each tool. These findings will be continually fed to the other 2 components at regular meetings.
4. Communication	M	Being a global project with multiple partners and agencies communication could be a risk factor. The project will hold regular Skype meetings with all partners and keep in regular contact by email, Skype and phone to ensure communication runs smoothly. A shared Google Drive will also be set up to ensure all partners have the latest versions of working documents.

A.7 Coordination with other relevant GEF financed initiatives

The project will be coordinated by UNEP DEWA with UNEP as the GEF agency. Components 1 and 2 will be led by Colorado State University. Component 2 will involve work sub-contracted to WOCAT. Component 3 will be led by the World Bank (working in conjunction with CSU and Eco&Sols).

At the core of this project is coordination with other initiatives as the objective is to create an environment which will make it easier for land managers to realize the climate change co-benefits of sustainable land management practices. This involves identifying and working with activities which are already ongoing. Links with the GEF LADA consortium will be in place from the offset through the WOCAT/LADA initiative currently being co-funded by the GEF. In addition FAO and LADA projects will be amongst those participating in training workshops in Component 1. Component 1 will train project managers from GEF projects which are already running or are awaiting approval. In each geographic region (identified as not having received training under the GEF CBP) GEF implementing agencies (UNEP, UNDP, FAO and WB) will be approached to nominate project managers to attend training sessions. In addition, links will be made with GEF programmes operating in the relevant geographic areas (the Indian sub-continent, West Africa, South Africa, Central America and Eurasia) to help identify trainees. For example in India, the GEF Sustainable Land and Ecosystem Management Partnership Programme, UNDP and FAO will be approached to identify personnel who would benefit from CBP-WOCAT training.

Links have already been developed with the UNCCD Knowledge Management Science and Technology (KMST) office and the project intends to work closely with KMST to; 1) offer training to personnel in relevant UNCCD supported activities 2) ensure the aims and objectives of the UNCCD are prioritized throughout the project. UNCCD staff will be invited to participate remotely in project meetings where appropriate.

Component 1 will also work with the 5 projects nominated by the GEF for full implementation of the CBP Modelling tools. See section A1.3 Component 1 for details.

The third component of the project will work in conjunction with GEF, UNDP, FAO, IFAD, UNEP, ADB, AfDB, and IAB. It will therefore work with the majority of the GEF's implementing agencies. Component 3 will provide information on available tools and match project needs to the appropriate tools. In order to do this links to appropriate programmes in each of the implementing agencies will be established. In addition, links to other initiatives outside of the GEF will be a major part of the project as it will be necessary to form links with the developers of GHG tools and protocols. The team is in a good position to do this with team members having led 2 major reviews of available GHG tools (Colomb et al. 2013; Milne et al. 2012, 2013).

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

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

Stakeholders include;

Managers of sustainable land management projects (GEF and non-GEF):

Considerable interest in using the tools and receiving training has been shown by a number of GEF and non-GEF projects. The managers of these projects will be key stakeholders in this project. Five GEF project managers will work with the project very closely, receiving sustained support to implement the tools in their projects and devise realistic strategies for continued monitoring of C benefits after project completion. In addition other GEF project managers will be encouraged to participate in the training events through which we will aim to train at least 120 people. The project will strive to have a fair gender representation at all training events.

Land managers (farmers, pastoralists and foresters):

The 5 GEF land management projects using the CBP tools in Component 1 of the project will include land managers. For these projects, project managers will be required to engage with land managers prior to the start of this project to raise awareness about carbon and GHG accounting. The project will also aim; through collaboration with LandPKS to introduce some of the innovative mobile phone data collection technologies to land managers involved in the projects and trial their use.

UNCCD

The project will work closely with UNCCD to ensure tools are relevant and useful to those implementing SLM through UNCCD supported activities.

GEF agencies

The following GEF agencies will be involved in the project: UNEP, FAO, UNDP, WB and IFAD. Interest has also been expressed by IUCN as a new GEF agency. All of these agencies have requested training sessions on the CBP tools and shown willingness to either host trainers and provide venues or pay for personnel to travel to training sessions. Details are provided in the support letters in Annexe C. Programme officers and other agency personnel involved in reporting on SLM projects will be included in the training sessions.

Organizations managing carbon markets

Organizations responsible for carbon certification and financing will also be stakeholders in the project as we will align the CBP tools with their needs. This will allow those projects that wish to get credits for carbon mitigating

activities to use the CBP tools in a compatible way. Support is being given by VCS (The Verified Carbon Standard) see the support letter in Annex C.

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):

Sustainable land management and natural resource management can provide multiple global environmental benefits including climate change mitigation. Enhancing and maintaining carbon stocks in biomass and soils can also lead to improved water use efficiency, reduced risk of flooding, reduced erosion and increased productivity. All of these environmental services can have positive impacts on livelihoods improving food security and reducing risk of environmental hazards (such as flooding and erosion). This project, by enabling SLM projects to monitor and report the carbon co-benefits of their activities will provide information on socio-economic impacts in both the short and long-term.

The CBP tools include costs benefit analysis which allows users to analyze the monetary costs associated with different land management strategies so that the financial as well as the C cost can be considered. It also includes the only online example of a DPSIR (Drivers, Pressures, State, Impact, Response) analysis which helps users to assemble and consider the social and economic consequences of C friendly land management strategies. At the local level this kind of analysis can help land managers make fully informed decisions about whether to implement land management practices which have C benefits. At the national level information on the economic and social issues surrounding different C friendly land management strategies can be used to provide policy makers with valuable information.

Some slight changes have been made to institutional arrangements as set out in the PIF. Institutional arrangements are therefore explained here:

The project will be run through UNEP/DEWA (the EA) with a UNEP Project Coordinator answering to UNEP DEPI who will then report to the GEF Task Manager. Colorado State University (CSU) will be the lead institution for Components 1 & 2 and will engage a Project Manager to coordinate all scientific and financial matters relating to these 2 components. CSU will report to UNEP/DEWA. CSU will subcontract WOCAT to carry out specific tasks on Components 1 and 2. LandPKS will also work with CSU and WOCAT without a sub-contract. CSU will also sub-contract the lead institutions responsible for the 5 GEF test case projects. These sub-contracts will be devised individually and will take into account any budget the projects have already committed to the monitoring and reporting of carbon impacts.

The World Bank (WB) will be the lead institution for Component 3 and will report to UNEP/DEWA. The WB will also work with IRD France on Component 3.

A project steering committee comprising of one senior member of each of the project partners will guide the project and review all outputs before final release.

Background on each of the institutions involved and their comparative advantage to be involved in this project are given below.

Colorado State University

The Natural Resource Ecology Laboratory (NREL) at Colorado State University is a world leader in terrestrial greenhouse gas assessment and mitigation. For over 30 years NREL have led the development of ecosystem biogeochemical modelling. NREL have developed tools for carbon and GHG accounting at a variety of scales (from national to project) which are being used throughout the world. One set of tools are those developed under the GEF's Carbon Benefits Project (CBP). The CBP tools were developed specifically to allow GEF land management projects to estimate the impact of land management projects on carbon stock changes and GHG

mitigation. Three options are provided a Simple Assessment, a Detailed Assessment and a Dynamic modelling option. The tools have been applied in projects in Africa, Asia and Latin America.

WOCAT

The World Overview of Conservation Approaches and Technologies (WOCAT) is an established global network of Soil and Water Conservation (SWC) specialists, contributing to sustainable land management (SLM). Since 1992, WOCAT has built up standardized tools for knowledge management and decision support for up scaling SLM. Good practices are described and their impacts are assessed in view of economic, environmental and social costs and benefits. Thus, the growing database provides relevant information to be used for assessing carbon benefits of various land management options. WOCAT has a database of approximately 500 technologies for the conservation of soil and water. The technologies are country specific and provide an invaluable resource for thousands of land managers, project specialists and advisors. During the development of the Carbon Benefits Modelling Tools, content from WOCAT was used to help populate the Simple Assessment with default information on cropping, grassland and forest land systems. In order to minimize duplication of basic data collection on land management and to use synergies between WOCAT and CBP, the tools and databases need to be linked and harmonized. Linking the tools together will supply users looking for best SLM practices with information on the likely carbon/GHG impacts of these practices. It will also supply users designing GHG mitigation projects with a database of potential C friendly SLM practices. This will save time, money and effort and capitalise on the substantial investment already made by GEF and other agencies on the development of these tool sets.

The World Bank - Carbon Accounting Programmes

The World Bank is the largest multilateral funding agency in areas such as energy, climate change mitigation and adaptation, forestry and environmental conservation, agricultural development, and socio-economic development. The Bank has also initiated many projects related to climate change, particularly in the land-use sectors. The Bank was the first agency to launch “The BioCarbon Fund,” which pilots innovative carbon payments in the land-use sector. Further, the Bank was one of the first agencies to launch a large program on REDD, the Forest Carbon Partnership Facility. The Bank also hosts the Global Environment Facility (GEF), which has a dedicated program on REDD, land degradation, and sustainable forest management.

The main themes supported by the World Bank include economic management, human development, environment and natural resources management, rural development, financial and private sector management, public sector governance, trade and integration, social development including gender issues, social protection and risk management, and urban development. These themes are further divided into sectors, and some examples of sectors presently under project operations are as follows:

- Land-related sectors—agriculture, fishing, and forestry, water, sanitation, and flood protection
- Energy sector—energy and mining
- Finance, education, health, industry and others— public administration, law and justice, information and communications, education, finance, health and other social services, industry and trade, and transportation.

A substantial number of categories or types of projects typically funded by the World Bank to advance its major themes provide multiple benefits including environment conservation, enhanced food production and security, and economic development as well as providing C-benefits, typically as co-benefits. Examples of these types of projects under the World Bank portfolio include: The Uttar Pradesh Sodic Land Reclamation Project (UPSLRP III) in India; The Sanata Catarina Rural Competitiveness Project in Brazil; The Agricultural Growth Project in Ethiopia; The China Integrated Modern Agriculture Development Project (IMAD); and the Integrating Climate Change in the Implementation of the Plan Maroc Vert in Morocco. Carbon, its enhancement, and its monitoring in developmental and NRM projects, particularly in the land-related sectors, is of paramount interest to World Bank clients, project developers, and project evaluators.

IRD - Institut de recherche pour le développement

The IRD (Institut de recherche pour le développement) is a French research organization focusing on development research with an emphasis on interdisciplinarity. For over 65 years, IRD has focused its research on the relationship between man and its environment, in Africa, the Mediterranean, Latin America, Asia and the French tropical overseas territories. The IRD team involved in this proposal have expertise on tools to appraise GHG budget, as demonstrated by its close collaboration with FAO concerning the ex-ante C-balance Tool (EX-ACT, www.fao.org/tc/exact/) and the AgER project. During the AgER project (Carbon balance: Agriculture at the Regional Scale) IRD worked with Ademe and FAO to do a preliminary review of existing GHG calculators and tools in the agriculture and forestry sector, at farm, region and country level and proposed a simple prototype (<http://ird.t-t-web.com/Select-en.php>) to help users select the most appropriate calculator for a landscape-scale GHG assessment of activities in AFOLU sectors. The IRD team is also participating in the COMET-Global project consortium (JPI-FACCE call on Agricultural Greenhouse Gas Research) which aims to develop a user-friendly, web-served tool for full GHG accounting at the farm-scale for each of the countries in consortium (USA, European countries and Australia). In addition the IRD team participated in the GEFSOC project and the Modelling Component of the GEF Carbon Benefits Project.

Land Potential Knowledge System (LandPKS)

The global Land Potential Knowledge System (LandPKS) is a new system for matching land use with potential using evidence-based, site specific land use and management information. The system makes innovative use of cloud computing, mobile apps and crowd sourcing. The system facilitates more rapid and complete integration and dissemination of local and scientific knowledge about sustainable land management.

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

The project will be highly cost effective as it builds on much previous GEF work, involves existing GEF projects and has most of the current GEF agencies as partners. In Component 1, the training events will be hosted and paid for by the GEF agencies, with this project only paying for the time and expenses of the trainers. The training materials are all in place (having been used successfully on many previous occasions) as are the tools themselves. Involvement of the WOCAT network will mean that training events are even more cost effective, with participants receiving training on the use of a set of tools in an integrated manner. For the 5 GEF projects which will fully implement the tools, we will work with them to show how they can use the existing information they have in a cost effective manner to make estimates of the C impact of their activities.

In Component 2, feedback on the tools and suggested enhancements have already been provided by GEF STAP, therefore implementation can begin immediately making efficient use of the technical teams time.

Component 3 is cost effective as it builds on existing pioneering activities to compare GHG tools and match them to the specific requirements of different SLM and NRM projects. It also benefits from involvement of the WB and the large GHG programme it supports.

C. DESCRIBE THE BUDGETED M & E PLAN:

UNEP will be responsible for managing the mid-term review/evaluation and the terminal evaluation. The Project Manager and partners will participate actively in the process.

The project will be reviewed or evaluated at mid-term as indicated in the project milestones. The purpose of the Mid-Term Review (MTR) or Mid-Term Evaluation (MTE) is to provide an independent assessment of project performance at mid-term, to analyze whether the project is on track, what problems and challenges the project is encountering, and which corrective actions are required so that the project can achieve its intended outcomes by project completion in the most efficient and sustainable way. In addition, it will verify information gathered

through the GEF tracking tools. [Note: For a short duration project, PIR will serve as the project Mid-Term Review (MTR)]

The project Steering Committee will participate in the MTR or MTE and develop a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the DEWA UNEP Coordinator to monitor whether the agreed recommendations are being implemented. An MTR is managed by the UNEP Task Manager. An MTE is managed by the Evaluation Office (EO) of UNEP. The EO will determine whether an MTE is required or an MTR is sufficient.

An independent terminal evaluation (TE) will take place at the end of project implementation. The EO will be responsible for the TE and liaise with the UNEP Task Manager throughout the process. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: to provide evidence of results to meet accountability requirements, and to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP and executing partners.

While a TE should review use of project funds against budget, it would be the role of a financial audit to assess probity (i.e. correctness, integrity etc.) of expenditure and transactions.

The TE report will be sent to project stakeholders for comments. Formal comments on the report will be shared by the EO in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six point rating scheme. The final determination of project ratings will be made by the EO when the report is finalized. The evaluation report will be publically disclosed and will be followed by a recommendation compliance process.

The direct costs of reviews and evaluations will be charged against the project evaluation budget. The M&E plan with indicative costs is given in Table B:

1 Evaluation Plan with Indicative costs

Targets to be evaluated (Annex	Responsible Parties	Time-Frame (3 yrs)	Indicative cost to GEF	Indicative cost to CSU
	Lead by the Project Coordinators (PCs) from CSU and WB, involving all parties	Within 2 weeks after project start	\$600 (to set up a Web Ex Account for 1 year) + 250 = 850	414
	Lead by the PC involving all parties	Monthly for Comp 1 & 2 members Bimonthly for all members (1,2 & 3)	1200	584
	Hosted by CSU	Within 3 months after project start	21,950	10,690
	PC	Within 3 weeks of Project Inception meeting	2,000	974
1-term targets 1.3, 1.4, 2.1, A 2.3 & 3.1A	PC with input from all project partners	End of year 1	2500	1217
1-term targets 1.1, 1.2, 2.2B, 3, 3.1C & 3.2	PC with input from all project partners	End of year 2	2500	1218
1 and end term ets	PC with input from all project partners	Half yearly	5000	2,435
1 and end term ets	UNEP PM with input from the partners via the PC	Half yearly	5000	2,435
1 and end term ets for 1.3	Comp 1&2 PC, Technical Lead	As appropriate	34,000	16,558
1 targets for all outs and comes for all onents	UNEP PM/DGEF Task Manager	3 months prior to the "terminal" review meeting	40,000	19,480
	PC, UNEP PM/DGEF Task Manager	PC with the UNEP PM final clearance and processing by UNEP/DEWA	5000	2,435
TOTAL			120,000	58,440

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. SGP, use this [OFP endorsement letter](#)). N/A

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)

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 project identification and preparation.					
Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
J. Christophe Bouvier Director, Office for Operations and Corporate Services, UNEP GEF Coordination Office		23 July 2015	Mohamed Sessay Portfolio Manager, UNEP GEF	+254 20 762 4294	Mohamed.sessay@unep.org

RESULTS FRAMEWORK

Objectively verifiable indicators					
Indicator	Baseline	Mid-term target	End target	Sources of verification	Assumptions
<p>GEF and non-GEF projects recognizing and realizing the benefits of SLM and NRM practices. GEF and non-GEF projects reporting C co-benefits using the appropriate C/GHG assessment tools for their circumstances.</p>			<p>GEF agencies having capacity to choose, use and provide training on C/GHG tools. GEF and other SLM project managers using tools to realize and report on climate change co-benefits of SLM projects and engaging with C markets where desired.</p>	<p>Assessment of the number of GEF and non-GEF projects using appropriate C assessment tools such as the CBP and others and engaging with a C market where desired. SLM CCMC Impact Evaluation. Future GEF OP Assessments.</p>	<p>GEF agencies remain engaged and supportive.</p>
Monitoring and outreach for existing tools					
<p>At least 25 summary reports produced using the CBP system for SLM projects involved in the training (at least 5 for each workshop).</p>	<p>Few reports of carbon co-benefits being produced for GEF projects, or if produced not being fed back to GEF agencies or GEF.</p>	<p>3 workshops held</p> <p>70% of training event participants actively using CBP tools 6 months after the event</p>	<p>5 workshops held</p> <p>70% of training event participants actively using CBP tools 6 months after the event</p>	<p>GEF project final assessments. UNEP tracking CBP use. Uptake of tools monitored following training events.</p>	<p>Training event participants have projects or proposals they can apply the tools to after the training events.</p>
<p>At least 15 documented examples of geographically specific C friendly land management practices added to the WOCAT database.</p>	<p>Examples of best practice from GEF SLM projects (in terms of carbon co-benefits) not added to the WOCAT database.</p>	<p>9 examples of good/best practice documented and added to the WOCAT data base.</p>	<p>15 examples of good/best practice added to the WOCAT data base.</p>	<p>Review of the WOCAT database for new entries using information from the CBP training sessions.</p>	<p>Appropriate people attend the training events.</p>

the CBP's Simple or Detailed Assessment in 5 GEF projects with the on-going support of the SLM CCMC.	the C benefits of their land management activities made using the on-going guidance and support of the SLM CCMC.	report C co-benefits or produce partial estimates which cannot be compared.	ex ante assessment using the SA and a detailed report produced. After 10 months all have monitoring systems in place.	in-depth ex post assessment and a long-term monitoring plan.	by the CBP system for 5 GEF projects for 2 points in the project lifetime.	commitment to estimating C benefits.
1.4 Project managers trained to document good/best land management practices, linked to CBP assessment for 5 GEF projects	10 personnel at (least 2 from each of the 5 GEF case study projects) able to interpret CBP outputs to identify best land management practices in terms of C but also in socio-economic terms.	Best land management practice in terms of C benefits not identified in the 5 GEF test case projects and information not disseminated through WOCAT.	Month 10, each of the 5 GEF projects produce a report on the best practices in terms of C benefits to feature in their projects.	Month 30 each of the 5 GEF projects have uploaded examples of Best practice to the WOCAT data base.	DPSIR reports and CBA reports for the 5 GEF projects. Documentation identifying best land management practices in terms of C and socio-economic considerations.	Some examples of best practice for C benefits can be found in the 5 GEF projects.
Outcome 1 Outcome - Enhanced capacity to measure, monitor and model carbon benefits from GEF land management projects using the CBP/WOCAT tools in several GEF agencies and for GEF project personnel.	125 + people trained to measure, monitor and model carbon benefits from land management projects. CBP reports from 30 SLM projects.	Capacity to measure, monitor and model carbon benefits from GEF land management projects is low and fragmented.			Attendance records and feedback from training workshops. Reports from CBP system fed back to GEF agencies and GEF.	
Component 2: Enhancement of existing tools						
Outputs 2.1 An enhanced toolset with increased efficacy in terms of spatial data and accessibility as well as direct relevance to specific finance/certification schemes	Six new features added to the CBP toolset. Additional guidance and help content added to aid users to align with C certification schemes. Approval for relevant parts of the CBP toolset by a C certification scheme.	Current capabilities of CBP toolset remain the same. Enhancements suggested by the GEF STAP and others are not implemented.	Features 2,3,4 and 6 added by end of year 1. Features 1 ongoing throughout and beyond the project. Feature 5, added by end of year 2. By the end of Year 1, guidance added	New release of CBP toolkit with six new features in place, tested and fully functioning. End of project, at least 1 example of GEF SLM projects applying for C finance using the	Feedback from CBP/WOCAT user group. VCS or other scheme approval for relevant parts of the CBP system. GEF projects using CBP	The additional features outlined in this proposal remain a priority for GEF STAP and GEF users. New technologies will also be explored during the project to keep the tools as current as possible.

			to the detailed assessment for how to align with the needs of a specified C finance scheme. End of Yr 2 additional features added to enhance relevance to C finance scheme.	CBP tools.	system to estimate C benefits for certification schemes.	Involvement of SLM projects in C finance schemes remains a priority of the GEF.
2.2 An interlink between the CBP and WOCAT tools	Best land management practice in terms of C benefits identified using the linked toolset for 8 projects. Evidence of use of the linked features in wider network of GEF and WOCAT projects.	Both tool sets continue to be used separately and opportunities to identify best practice in terms of C benefits are missed.	A) End of Yr 1 CBP tools used to estimate C benefits in 3 WOCAT projects. B) End of Yr 2 link between WOCAT and CBP tools made.	End of yr 3 CBP and WOCAT being used in conjunction to identify best practice in terms of C benefits in the 5 GEF test case projects 3 WOCAT projects and throughout the WOCAT network of projects.	Feedback from new users to the CBP site, analysis of new entries in the WOCAT database.	There is continued high demand for the use of both tools together.
2.3 A reporting database for UNEP GEF staff to use to access, store and analyse reports generated by the CBP system.	UNEP GEF staff using a reporting database to analyse information on carbon benefits from GEF projects across focal areas, geographic regions and other strata.	Analysis of C benefits of multiple GEF projects is time consuming as UNEP GEF staff have to analyse reports individually and methods used by projects are not standardized.	Database completed in year 1 of the project.	Demonstrations on use of the database for UNEP GEF staff in years 2 and 3.	UNEP GEF staff are willing to use the data base and maintain it.	
Outcome 2 SLM and NRM projects using the combined tool set to identify appropriate C friendly practices track and report them once implemented and engage with C finance schemes where appropriate.	GEF projects reporting back to GEF agencies on C benefits, C friendly best practice and plans to apply for C finance based on information produced using the CBP/WOCAT toolset.	Limited no. of GEF projects reporting back to GEF agencies on C benefits, C friendly best practice and plans to apply for C finance.			GEF agencies internal reviews. Results from GEF agencies that can be fed into UNEPs GEO. Feedback from selected C certification schemes.	

Component 3: Comparative analysis of C accounting tools for SLM						
<p>Outputs</p> <p>3.1. A guideline/manual for GEF and other managers of SLM projects for choosing the most appropriate tools to measure carbon benefits and guidance note.</p>	<p>Delivery of a manual providing Comprehensive guidance /manual developed to help project managers choose the most appropriate tools for the job.</p>	<p>Project managers are not aware of available tools and do not use the most appropriate tools for C accounting due to confusion over tools.</p>	<p>A) By month 6, major tools identified. B) After 18 months decision tree developed. C) After 2 years draft guide produced.</p>	<p>After yr 2, ex post application of a selection of tools to the 5 GEF projects. After yr 2, extensive consultation conducted and the results embedded into the final manual/guidance.</p>	<p>A guidance/manual document produced by the WB team to guide project managers to the appropriate C/GHG tools for their needs. The team includes a diversity of experts with knowledge required. Extensive ex ante consultation with experts. Extensive ex post peer-review of the final draft.</p>	<p>Tool developers are willing to share information needed for comparisons.</p>
<p>3.2 An e-learning module to facilitate peer learning amongst GEF managers and global knowledge sharing amongst natural resource managers</p>	<p>A fully functional e-learning module is developed with 3 courses.</p>	<p>Peer learning on GHG accounting tools remains low amongst GEF and other project managers.</p>	<p>By month 18, the three e-learning module courses are identified.</p>	<p>After 24 months the modules are fully developed incorporating lessons learnt from tool applications.</p>	<p>Number of courses developed within e-learning. Target = 3.</p>	<p>Willingness and active interest of the participants to learn</p>
<p>Outcome 3</p> <p>GEF and other managers of SLM projects have enhanced understanding of the wide range of tools available (outside of and including the CBP tools) and their application contexts.</p>	<p>Uptake of the manual and e-learning module by GEF agencies resulting in enhanced capacity to report on C benefits.</p>	<p>NRM and SLM project managers are not aware of or do not choose the most appropriate tools for C reporting.</p>			<p>Number of downloads of the manual; number of people taking up the e-learning courses; experienced team working on the component development with diverse knowledge; ex ante consultation with partners conducted; ex post</p>	

					peer-review conducted; results of peer-review are embedded into the final draft.	
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ANNEXE B REFERENCES

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