GEF EO Terminal Evaluation Review Form

1. PROJECT DATA				
			Review date:	19/12/2006
GEF Project ID:	1378		at endorsement (Million US$)	at completion (Million US$)
IA/EA Project ID:	321	**GEF financing:**	0.98	NA
Project Name:	Assessment of Soil Organic Carbon Stocks and Change at National Scale	IA/EA own:		
Country:	Global	Government:		
		Other*:		
		Total Cofinancing	1.02	NA
Operational Program:	OP12	**Total Project Cost:**	2.00	NA
IA	UNEP	Dates		
Partners involved:	International Development Centre of the University of Reading, UK,	Work Program date		
		CEO Endorsement		12/19/2001
		Effectiveness/ Prodoc Signature (i.e. date project began)		January 2002
		Closing Date	Proposed: March 2005	Actual: July 2005
Prepared by: Neeraj Negi	Reviewed by: Aaron Zazueta	Duration between effectiveness date and original closing: 39 months	Duration between effectiveness date and actual closing: 43 months	Difference between original and actual closing: 4 months
Author of TE: Peter Grace		TE completion date: October 2005	TE submission date to GEF OME: December 2005	Difference between TE completion and submission date: Two months

* Other is referred to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

2. SUMMARY OF PROJECT RATINGS

GEF EO Ratings for project impacts (if applicable), outcomes, project monitoring and evaluation, and quality of the terminal evaluation: Highly Satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU), not applicable (N/A) and unable to assess (U/A). GEF EO Ratings for the project sustainability: Highly likely (HL), likely (L), moderately likely (ML), moderately unlikely (MU), unlikely (U), highly unlikely (HU), not applicable (N/A), and unable to assess (U/A).
Please refer to document "Ratings for the achievement of objectives, sustainability of outcomes and impacts, quality of terminal evaluation reports and project M&E systems" for further definitions of the ratings.

	Last PIR	IA Terminal Evaluation	Other IA evaluations if applicable (e.g. IEG)	GEF EO
2.1 Project outcomes	HS	HS	NA	MS
2.2 Project sustainability	N/A	MS	NA	UA
2.3 Monitoring and evaluation	HS	S	NA	S
2.4 Quality of the evaluation report	N/A	N/A	HS	S

Should this terminal evaluation report be considered a good practice? Why?

This is a satisfactory TE report. Coverage of issues such as achievement of outcomes and monitoring and evaluation is good. However, it covers issues related to risks have been covered sparingly.

Is there a follow up issue mentioned in the TE such as corruption, reallocation of GEF funds, etc.?

No such issues have been mentioned.

3. PROJECT OBJECTIVES, EXPECTED AND ACTUAL OUTCOMES

3.1 Project Objectives

- **What are the Global Environmental Objectives? Any changes during implementation?**

According to the Project Appraisal Document (PAD) submitted for CEO Endorsement, the goal of the project was to "improve national assessment methodologies relating to land use options and UNFCCC requirements, and to support core activities of the GEF Integrated Ecosystem Management Operational Program and IPCC by developing and demonstrating generic tools which quantify the impact of land management and climate scenarios on carbon sequestration in soils."

The TE report has not listed this goal and it also does not inform us on whether there were any changes in it during implementation of the project.

- **What are the Development Objectives? Any changes during implementation?**

According to the TE report the stated development objectives of the project include:

- The identification and use of long term experimental datasets to systematically evaluate and refine modeling techniques that allows the estimation of carbon sequestration in tropical soils;
- The definition, collation and formatting of national-scale soils, climate and land-use datasets and to use them in the development of coupled modeling – Geographic Information System (GIS) tolls to estimate soil carbon stocks;
- The demonstration of these tools by estimating current soil organic carbon (SOC) stocks and country – scale (using India, Jordan, Kenya and Amazon-Brazil as case studies) and to compare these estimates with the existing techniques of combining soil mapping units and interpolating point data; and,
- To quantify the impact of defined changes in land use on carbon sequestration in solid with a view to assisting in the formulation of improved policies to optimize resource use in the four case study countries.

These objectives are the same as those listed in the Project Appraisal Document submitted for CEO approval. Therefore, it could be inferred that there has been no change in the development objectives of the project.

3.2 Outcomes and Impacts

- **What were the major project outcomes and impacts as described in the TE?**

According to the TE report the project has had following impact:

- As a result of the project, institutions in Brazil, India, Jordan and Kenya now have significant capacity in the use of GIS model interfaces and SOC stock assessment, having been instrumental in the development of the GEFSOC Modeling system. These institutions are now in a unique position globally as they have co-developed the only generically applicable system for making processes based estimation of SOC stock changes, built on data from developing countries.
- There are solid indications arising from the survey information that the project datasets will be a welcome addition in developing inventories.

- The project has facilitated development of IPCC methods for estimating carbon emissions from solid.
- The global datasets have been incorporated into the 2003 Good Practice Guidance for Land Use, Land Use Change and Forestry (LULUCF) greenhouse gas inventories and are currently being incorporated into the IPCC 2006 guidelines for National Green House Gas Inventories.
- The GEFSOC Modeling System will soon be publicly available.
- The project has produced 9 papers in peer reviewed scientific journals to date. In addition, a special issue has been agreed with Agriculture Ecosystems and Environment, which will present the project findings in 13 peer reviewed papers.

4. GEF OFFICE OF M&E ASSESSMENT

4.1 Outcomes

A Relevance **Rating: MS**

- **In retrospect, were the project's outcomes consistent with the focal areas/operational program strategies? Explain**

The project aimed at improving national assessment methodologies relating to land use options and UNFCCC requirements, and to support core activities of the GEF Integrated Ecosystem Management Operational Program and IPCC by developing and demonstrating generic tools which quantify the impact of land management and climate scenarios on carbon sequestration in soils. This objective is consistent with the strategic objectives of the Strategic Priority on Adaptation (SPA) OP. However, the project has been listed under OP12 which doesn't aim at addressing natural resource management issues related to a single GEF focal area, but at bringing synergy between focal areas such as Biological Diversity, Climate Change, International Waters, and Land Degradation to optimize multiple benefits. The Project Appraisal Document and the TE have both not explained how the project outcomes are linked with the strategic priorities of the other focal areas. It is in this sense that the outcomes of the project are not consistent with the adopted operational program although the outcomes are consistent with the GEF focus on global environmental benefits.

B Effectiveness **Rating: HS**

- **Are the project outcomes as described in the TE commensurable with the expected outcomes (as described in the project document) and the problems the project was intended to address (i.e. original or modified project objectives)?**

According to the TE the project has been successful in meeting or exceeding all of its objectives and outputs committed to in the project proposal.

- The identification and use of long term experimental datasets to systematically evaluate and refine modeling techniques that allows the estimation of carbon sequestration in tropical soils. According to the TE report, in delivering this outcome the project has not only met but has exceeded the expectations.
- The definition, collation and formatting of national-scale soils, climate and land-use datasets and to use them in the development of coupled modeling – Geographic Information System (GIS) tolls to estimate soil carbon stocks:
- The demonstration of these tools by estimating current soil organic carbon (SOC) stocks and country – scale (using India, Jordan, Kenya and Amazon-Brazil as case studies) and to compare these estimates with the existing techniques of combining soil mapping units and interpolating point data:
- To quantify the impact of defined changes in land use on carbon sequestration in solid with a view to assisting in the formulation of improved policies to optimize resource use in the four case study countries. According to the TE report all expectations pertaining to this outcome have been met or have been exceeded.

Thus, it could be inferred that the project has been highly effective in delivering expected outcomes.

C Efficiency (cost-effectiveness) **Rating: NA**

- **Include an assessment of outcomes and impacts in relation to inputs, costs, and implementation times based on the following questions: Was the project cost –**

effective? How does the cost-time Vs. outcomes compare to other similar projects? Was the project implementation delayed due to any bureaucratic, administrative or political problems and did that affect cost-effectiveness?

Although, the TE has reported that the project was able to accomplish all its targets well within the allocated budget and that there were no inordinate delays in implementation of the project, this information is not sufficient to determine whether the project was cost effective.

Impacts
• **Has the project achieved impacts or is it likely that outcomes will lead to the expected impacts?** Based on the narrative in the TE report it could be said that it is likely that outcome will lead to expected impacts. The TE report indicates that many of the positive impacts and trends that could be attributed to the project are becoming evident. Such impacts and trends have been described in section 3.2 of this TER.

4.2 Likelihood of sustainability. Using the following sustainability criteria, include an assessment of **risks** to sustainability of project outcomes and impacts based on the information presented in the TE.

A Financial resources	**Rating: UA**
The issue of financial risks to the sustainability of the outcomes has not been addressed by the TE.	
B Socio political	**Rating: UA**
The issue of socio-political risks to the sustainability of the outcomes has not been addressed by the TE.	
C Institutional framework and governance	**Rating: ML**
The TE does address some aspects of institutional framework and governance related risks to the sustainability of the outcomes. It explains that although the scientists from the project area countries have been trained in use of GEFSOC modeling System, there is a need for continued training. Further, no major planning exercise has taken place to ensure sustainability of the products developed by the project. It further informs that the scientists of the project area countries have indicated that there will be ongoing use and maintenance of products. The TE suggests that the institutional sustainability of the project outcomes will be better if CGIAR is to anchor the sustained activities on this front.	
D Environmental	**Rating: NA**
The issue of environmental risks has not been directly addressed by the TE. However, given the nature of the project – which focused on knowledge creation and development of tools for assessment of carbon changes – environmental risks are likely to be minimal.	

Provide only ratings for the sustainability of outcomes based on the information in the TE:

A Financial resources	**Rating: UA**
B Socio political	**Rating: UA**
C Institutional framework and governance	**Rating: ML**
D Environmental	**Rating: NA**

4.3 Catalytic role

1. Production of a public good According to the TE, the project has led to development of various generic tools that will be useful in formulation of national and sub national policies on monitoring soil carbon stocks; specific tools that could help the GEF identify, develop and select carbon sequestration projects; and, has build capacities in the institutions of the project area countries to use these tools. A specific example is development of GEFSOC Modeling System, which according to the TE, will assist national governments in improving their green house gas inventories under the UNFCCC requirements, as well as provision of a tool for improved land use management and sustaining or improving SOC stocks, a critical element for sustaining ecological productivity.
2. Demonstration
3. Replication According to the TE the products developed as under this project are likely to be used in many

other projects focused on assess soil carbon. For example, there are plans to use the GEFSOC Modeling System in the GEF Land Degradation Assessment in Dry-Lands (LADA) project aimed at building national, regional and international capacity to design and implement interventions to mitigate land degradation and establish sustainable land use and management practices. Further, the site scale and national scale data sets for all the GEFSOC case study countries will be used in the Quantifying and Understanding the Earth System (QUEST) Project in the UK, to calibrate soil components of a number of digital global vegetation models.

4. Scaling up

4.4 Assessment of the project's monitoring and evaluation system based on the information in the TE

A. In retrospection, was the M&E plan at entry practicable and sufficient? (Sufficient and practical indicators were identified, timely baseline, targets were created, effective use of data collection, analysis systems including studies and reports, and practical organization and logistics in terms of what, who, when for the M&E activities) Rating: MS

According to the TE report a preliminary monitoring and evaluation (M&E) plan was outlined in the PAD. This plan, also verified through review of the PAD, listed project objectives and indicators to measure the degree of achievement of those objectives. It also links the activities that would be taken up and links them to the corresponding objectives and also states underlying assumptions and risk. However, all this information is scattered in the PAD and has not been encapsulated.

B. Did the project M&E system operate throughout the project? How was M&E information used during the project? Did it allow for tracking of progress towards projects objectives? Did the project provide proper training for parties responsible for M&E activities to ensure data will continue to be collected and used after project closure? Rating: S

The TE informs that a comprehensive M&E plan was developed at the first meeting of the Project Steering Committee which included provisions and timelines for the collection and reporting of data relevant to the performance indicators identified for the project; the scheduling of the workshops and project steering committee meetings for self evaluation and assessment; identification of additional resources for M&E activities; and, the final composition of the project steering committee and its role in M&E and project delivery. The TE further informs that project steering committee met regularly, comprehensive quarterly reports were prepared, a technical report was prepared to provide information for the TE, and a comprehensive risk management strategy was outlined. The narrative of TE seems to suggest that the M&E system was implemented satisfactorily. Further, the review of the GEF Operational Program 12, where in this project was one of the project appraised, evaluates the quality of baseline measurement in this project to be of high order.

C. Was M&E sufficiently budgeted and was it properly funded during implementation? Rating: UA

Other than a passing reference to the Project Steering Committee looking for additional resources for M&E activities in its first planning meeting, the issue whether M&E was sufficiently budgeted and funded has not been addressed.

Can the project M&E system be considered a good practice?

While M&E system seems to have been implemented satisfactorily, the plan presented at the stage of CEO Endorsement was mediocre.

4.5 Lessons

Project lessons as described in the TE

What lessons mentioned in the TE that can be considered a good practice or approaches to avoid and could have application for other GEF projects?

The TE lists following major lessons:

- the need for more detailed scoping of data availability and accessibility within developing

world countries when a project is being developed; - ongoing support to post project training to ensure sustainability of the project outcomes could be a viable strategy in similar projects; - Problems associated with staff turnover and complications in arrangements with the partner countries could be minimized if the GEF approval process is more streamlined.

4.6 Quality of the evaluation report Provide a number rating 1-6 to each criteria based on: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, and Highly Unsatisfactory = 1. Please refer to the "Criteria for the assessment of the quality of terminal evaluation reports" in the document "Ratings for the achievement of objectives, sustainability of outcomes and impacts, quality of terminal evaluation reports and project M&E systems" for further definitions of the ratings.

4.6.1 Comments on the summary of project ratings and terminal evaluation findings
In some cases the GEF Evaluation Office may have independent information collected for example, through a field visit or independent evaluators working for the Office. If additional relevant independent information has been collected that affect the ratings of this project, included in this section. This can include information that may affect the assessment and ratings of sustainability, outcomes, project M&E systems, etc.
"The review of the GEF Operational Program 12" had included this project for appraisal. In addition to the TE, project documents, and PIRs, this document was also used as a basis for TE review.

4.6.2 Quality of terminal evaluation report	**EO Ratings**	**UNEP Ratings**
A. Does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	5	6
B. Is the report internally consistent, is the evidence complete/convincing and are the IA ratings substantiated?	5	6
C. Does the report properly assess project sustainability and /or a project exit strategy?	3	6
D. Are the lessons learned supported by the evidence presented and are they comprehensive?	5	6
E. Does the report include the actual project costs (total and per activity) and actual co-financing used?	3	4
F. Does the report present an assessment of project M&E systems?	5	6

4.7 Is a technical assessment of the project impacts described in the TE recommended? Please place an "X" in the appropriate box and explain below.	**Yes:**	**No:** **X**
Explain:		

4.8 Sources of information for the preparation of the TE review in addition to the TE (if any)

Project Appraisal Document; PIR 2004, 2005; OP 12 document. The review of the GEF Operational Program 12: Integrated Ecosystem Management