GEF EO Terminal Evaluation Review Form for OPS4

1. PROJECT DATA				
			Review date:	
GEF Project ID:	645		at endorsement (Million US$)	at completion (Million US$)
IA/EA Project ID:		**GEF financing:**	$0.71	$0.71
Project Name:	Oaxaca Sustainable Hillside Management	IA/EA own:		
Country:	Mexico	Government:	0.44	0.44
		Other*:	0.41	0.41
		Total Cofinancing		
Operational Program:	Short-term measures: Targeted Research, focused on carbon sequestration Focal area: Climate Change-Land Degradation	**Total Project Cost:**	$1.56	$1.56
IA	World Bank	Dates		
Partners involved:	Gov. of Mexico: Project of Sustainable Rural Development in Marginal Areas (PSRDMA); Collegio di Postgraduos di Montecillos	Effectiveness/ Prodoc Signature (i.e. date project began)		July 1999
		Closing Date	Proposed: 30 June 2005	Actual: 30 June 2005
Prepared by: Pallavi Nuka	Reviewed by: Neeraj Negi	Duration between effectiveness date and original closing (in months): 72 months	Duration between effectiveness date and actual closing (in months): 72 months	Difference between original and actual closing (in months): 0 months
Author of TE: N/A		TE completion date: 30 October 2005	TE submission date to GEF EO: 30 December 2005	Difference between TE completion and submission date (in months): 2 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 AND KEY FINDINGS

Please refer to document GEF Office of Evaluation Guidelines for terminal evaluation reviews for further definitions of the ratings.

Performance Dimension	Last PIR	IA Terminal Evaluation	IA Evaluation Office evaluations or reviews	GEF EO
2.1a Project outcomes	**HS**	**N/A**	**NA**	**HS**
2.1b Sustainability of Outcomes	**HS**	**N/A**	**NA**	**L**
2.1c Monitoring and evaluation	**N/A**	**N/A**	**NA**	**HS**
2.1d Quality of implementation and Execution	**HS**	**N/A**	**NA**	**HS**
2.1e Quality of the evaluation report	**N/A**	**N/A**	**N/A**	**U**

2.2 Should the terminal evaluation report for this project be considered a good practice? Why?
The project completion memorandum for this project is of poor quality. The assessment presented in this review is primarily based on other sources of information.

2.3 Are there any evaluation findings that require follow-up, such as corruption, reallocation of GEF funds, mismanagement, etc.?
No.

3. PROJECT OBJECTIVES

3.1 Project Objectives

a. What were the Global Environmental Objectives of the project? Were there any changes during implementation?

The global environmental objectives of the Sustainable Hillside Management (SHM) program were to develop methods to combat land degradation due to "cut-and-burn" cultivation techniques and enhance carbon sequestration in rural agricultural landscapes.

There were no changes in global environmental objectives during implementation.

b. What were the Development Objectives of the project? Were there any changes during implementation? (describe and insert tick in appropriate box below, if yes at what level was the change approved (GEFSEC, IA or EA)?)

The project's development objectives were to develop and extend to farmers more environmentally sustainable and profitable land-management strategies for hillside environments. The specific objectives as described in the project document were to:

1. Generate field data on the carbon sequestration impacts of improving cultivation practices associated with the milpa* production system.
2. Develop an appropriate field methodology to measure carbon stock changes at field and micro-watershed levels, contributing to greater clarity on these broad scientific questions.
3. Generate valuable information on the social variables involved in working effectively with indigenous and rural communities so that sustainable land-use systems, integrating carbon sequestration objectives, are adopted in practice.
4. Assist GEF in developing operational guidance for projects to combat Land Degradation and to enhance carbon sequestration in rural landscapes.

There were no changes in development objectives during implementation.

(*"milpa" system: developed on sloping lands, "milpa de ladera," is a complex mixed cropping system based upon maize crop in association with bean, chile, calebasse, potato, "chilacayote" etc.. This system has is of strategic importance for Mexican food security.)

Overall Environmental Objectives	Project Development Objectives	Project Components	Any other (specify)

c. If yes, tick applicable reasons for the change (in global environmental objectives and/or development objectives)

Original objectives not sufficiently articulated	Exogenous conditions changed, causing a change in objectives	Project was restructured because original objectives were over ambitious	Project was restructured because of lack of progress	Any other (specify)

4. GEF EVALUATION OFFICE ASSESSMENT OF OUTCOMES AND SUSTAINABILITY

4.1.1 Outcomes (Relevance can receive either a satisfactory rating or a unsatisfactory rating. For effectiveness and cost efficiency a six point scale 6= HS to 1 = HU will be used)

a. Relevance (of outcomes to focal areas/operational program strategies and country priorities) Rating: S
A.1. What is the relevance of the project outcomes/results to:
(i) the national sustainable development agenda and development needs and challenges?

The outcomes of this project on sustainable hillside management are of critical importance for food security, rural livelihoods, and rural economic development. This project was carried as part of the Government of Mexico's (GOM) "Project on Sustainable Rural Development in Marginal Areas" (PSRDMA), which addresses rural poverty and environmental degradation, with a special focus on improving agricultural productivity through sustainable land use management practices. The project was implemented in conjunction with PSRDMA activities in three indigenous areas in the State of Oaxaca (Cuicateca, Mazateca, and Mixe), which are all promoting sustainable agricultural practices, including control of land degradation.

(ii) the national environmental framework, agenda and priorities?

Traditional milpa cultivation methods in Oaxaca have resulted in heavy deforestation, particularly along steep slopes, and, under current human population pressures, do not allow sufficient time for regeneration of native vegetation and land quality. The outcomes of this project will help combat land degradation, conserve globally important ecosystems, and enhance carbon sequestration.

(iii) the achievement of the GEF strategies and mandate?

Measuring carbon sequestration is an important tactical issue with major public policy significance. The targeted research component of this project for developing specific below-ground carbon stocks assessment at farmers field and micro-watershed levels is relevant for more effective implementation of future carbon sequestration projects.

(iv) the implementation of the global conventions the GEF supports (countries obligations and responsibilities towards the convention as well as the achievement of the conventions objectives)

The project was implemented in close collaboration with on-going international programs, in particular a) the UNDP-funded program "Alternative to Slash-and-Burn," and b) the UNEP environmental impact assessment developed for the overall Central American Region.

A2. Did the project promote of International (Regional and / or Global) Cooperation and Partnership[1]

NA

b. Effectiveness **Rating: HS**

The project has accomplished all of its planned activities and achieved all of its expected outcomes in the 5-year timeline. All the annual reviews and the mid-term evaluation concur in rating the outcomes of this project as highly satisfactory. According to the terminal evaluations, the executing agency, the Collegio de Postgraduos de Montecillo, has generated "comprehensive and reliable" carbon pools data, which have been incorporated into a database "providing sound basis for carbon balance assessment" in the South Mexican Hillside environment. The project has strongly implicated stakeholders, through various **well-designed capacity building activities** and through the **introduction of appropriate technology that actually improves rural livelihoods.** This is evidenced by the high levels of participation in 25 communities and the demands to extend the project to neighboring regions.

The project has successfully developed an appropriate field methodology for carbon stock assessments and collected data on carbon and nutrient pools in about 10 different land use systems, including above soil surface (vegetation) and below soil surface (organic matter, roots). The carbon pools data has been incorporated into a GIS database that provides a model for future assessments of carbon sequestration potential in micro-watershed and regional levels.

The 2004 report indicates that project has been successful in disseminating and promoting the adoption of more sustainable farming methods. All the producers in three pilot micro-watershed areas have adopted the new agro-forestry system developed in this project, with largely positive results. The new system involves planting a living contour of peach trees every 10m and an improved milpa system. Monitoring and evaluation in the three selected micro-watersheds proves that the new cropping system is cost-effective, improves carbon sequestration, improves soil fertility, and increases crop yields. This new system is less labor-intensive and reduces the need for forest clearing, leading to better preservation of forest cover and bio-diversity. The use of cover crops to prevent soil erosion on steep hillsides, was identified as a weak point of the project, requiring more applied research.

A comprehensive socio-economic survey, conducted with participants in the three selected micro-watersheds, shows that the new cropping system is more profitable than the old, and that initial investments are recouped between the 3rd and the 4th year. The fact that the new cultivation techniques improve rural incomes is an important factor in the success of this program.

The project has developed a model for how to interact with and implement agricultural programs in partnership with indigenous peoples. The use of native language speakers, farmers field schools, and numerous training activities for

[1] Please consider for regional and global project only

farmers have helped ensure widespread adoption of the new cultivation techniques. The annual report and the terminal evaluation indicate that the program has generated strong interest in surrounding areas. The 2004 report notes: "The demand from indigenous communities beyond the pilot micro-watersheds is very strong, while in the selected area the development of the agro forestry/milpa system is very significant. In El Zompantle, Mixe Region, 43 producers have adopted the new system."

The project is well known in the State of Oaxaca by all stakeholders, at indigenous community and municipal level, at State Secretaries level, and at Federal level. As a result of the generally highly satisfactory performance, the government of the state of Oaxaca (where the project is being implemented) has committed Mexican pesos 5 million (approx. US $600,000) in order for the project to continue and replicate its work in surrounding areas.

c. Efficiency (cost-effectiveness) **Rating: HS**

In terms of the carbon sequestration benefits, this project was highly cost-efficient. The total project cost was $1.5 M. Carbon balance assessment between early 1999 and early 2005 show that carbon sequestration with peach tree contour lines amounts to amounts to 3 tons of C t/ha/yr. The number of hectares currently under improved cultivation is not listed in the terminal evaluation. But, it is mentioned that a potential carbon sequestration of 0.5 million tons of C/yr exists in the 170,000 hectares of suitable land in three selected regions. **This would indicate an average cost of $3/per ton of C/yr, if all of the suitable land is cultivated appropriately.**

Additional environmental benefits include improved soil fertility, erosion control, and forest conservation as through adoption of alternatives to slash-and-burn agriculture.

The final evaluation notes that although this project was designed as a targeted research project with the objective of developing a methodology, it has also proven to be highly cost-efficient in terms of improving crop yields and reducing labor required, thus increasing farmers' incomes. The 2004 report notes that profitability is 'highly satisfactory' with FIRR = 79% and NPV = US$ 13,762, and the breakeven point is between the 3rd and 4th years.

d. To what extent did the project result in trade offs between environment and development priorities / issues (not to be rated) – this could happen both during the designing of the project where some choices are made that lead to preference for one priority over the other, and during implementation of the project when resources are transferred from addressing environmental priorities to development priorities and vice versa. If possible explain the reasons for such tradeoffs.

This project did not encounter any trade-offs between environmental and developmental priorities.

4.1.2 Results / Impacts[2] (Describe Impacts) (please fill in annex 1 – results scoresheet and annex 2 – focal area impacts (against GEF Strategic Priority indicators, where appropriate and possible)

According to the terminal evaluation the project has developed a comprehensive and reliable methodology for carbon stock assessments and successfully promoted alternatives to slash and burn agriculture. The results are improved environmental outcomes in terms of carbon sequestration, soil fertility and erosion, as well as higher incomes for rural communities.

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. Use a four point scale (4= Likely (no or negligible risk); 3= Moderately Likely (low risk); 2= Moderately Unlikely (substantial risks) to 1= Unlikely (High risk)). The ratings should be given taking into account both the probability of a risk materializing and the anticipated magnitude of its effect on the continuance of project benefits.

a. Financial resources **Rating: L**

The State of Oaxaca has committed $600,000 to scale-up and replicate the project work.

b. Socio-economic / political **Rating: L**

The project has strong support at the municipal, State and Federal levels. Representatives from these levels have been involved in bi-annual meetings of the Technical Oversight Committee along with produce representatives. The growing number of participating farmers is growing.

c. Institutional framework and governance **Rating: L**

[2] Please consider direct and indirect global environmental results; any unexpected results; local development benefits (including results relevant to communities, gender issues, indigenous peoples, NGOs and CBOs)

The Secretary of State for Agriculture and advisors of the Governor of State, have visited the site to assess the potential for replication. Promised financial support from State and Federal agencies, as well the scientific authority of the Colegio de Postgraduados, indicates a strong likelihood of sustainability.
d. Environmental **Rating: L**
There do not seem to be any ongoing activities which could pose environmental risks for this project
e. Technological **Rating: L**
The new land use system, has been tested and validated in the three selected micro watersheds. Monitoring indicates environmental benefits and increased incomes for participating farmers.

4.3 Catalytic role[3]

a. INCENTIVES: To what extent have the project activities provide incentives (socio-economic / market based) to contribute to catalyzing changes in stakeholders
The new cultivation and land management techniques introduced by this project have improved yields and thus provided an incentive for farmers to switch away from traditional methods.
b. INSTITUTIONAL CHANGE: To what extent have the project activities contributed to changing institutional behaviors
No institutional changes mentioned in project reports.
c. POLICY CHANGE: To what extent have project activities contributed to policy changes (and implementation of policy)?
No policy or legal changes mentioned in project reports.
d. CATALYTIC FINANCING: To what extent did the project contributed to sustained follow-on financing from Government and / or other donors? (this is different than co-financing)
The State of Oxaca has agreed to provide $600,000 in follow-on funding to expand the project to other areas.
e. PROJECT CHAMPIONS: To what extent have changes (listed above) been catalyzed by particular individuals or institutions (without which the project would not have achieved results)?
No such individuals or institutions mentioned in project reports.

4.4 Assessment of processes and factors affecting attainment of project outcomes and sustainability.

a. Co-financing. To what extent was the reported cofinancing (or proposed cofinancing) essential to achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If it did, then in what ways and through what causal linkages?
Co-financing was 50% of the proposed project cost and it is reported to have materialized. Co-financing was critical for the capacity building and dissemination components of the project as well as for technical assistance on the adaptation of hillside cultivation. Detailed information on co-financing is not available from the annual reports and terminal evaluation. Ratings for financial management are high, and the executing agency was able to leverage additional in-kind financing from state and federal bodies.
b. Delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If it did, then in what ways and through what causal linkages?
There were no delays in project implementation or completion.
c. Country Ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability highlighting the causal links.
The local knowledge and expertise of the executing agency, the Colegio de Postgraduados, had a tremendous impact on the project's successful outcomes. The 2004 report notes that the commitment and recognized scientific authority of the Colegio, and the project's participatory approach, have resulted in additional human and financial resources committed to the Project, including training activities, transport and field events organizations, provided by the State, SAGARPA at the Federal level, and the Colegio itself

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

[3] Please review the 'Catalytic Role of GEF: How is it measured and evaluated – A conceptual framework' prior to addressing this section.

a. M&E design at Entry	**Rating (six point scale): S**
The project design included an M&E plan with clear objectives and expected outcomes. Measurable and descriptive indicators were detailed for each objective or expected outcome, so that progress could be easily assessed. Also included in the project design was a work schedule with timelines for each component.	
b. M&E plan Implementation	**Rating (six point scale): UA**
The annual reports and the terminal evaluation contain no information on the details of M&E implementation, but rate M&E as satisfactory.	
b.1 Was sufficient funding provided for M&E in the budget included in the project document? Yes	
b.2a Was sufficient and timely funding provided for M&E during project implementation? Unable to assess.	
b.2b To what extent did the project monitoring system provided real time feed back? Was the information that was provided used effectively? What factors affected the use of information provided by the project monitoring system? Insufficient information to asses**.**	
b.3 Can the project M&E system (or an aspect of the project M&E system) be considered a good practice? If so, explain why. **Unable to assess.**	

4.6 Assessment of Quality of Implementation and Execution

a. Overall Quality of Implementation and Execution (on a six point scale): HS
b. Overall Quality of Implementation – for IA (on a six point scale): S
Briefly describe and assess performance on issues such as quality of the project design, focus on results, adequacy of supervision inputs and processes, quality of risk management, candor and realism in supervision reporting, and suitability of the chosen executing agencies for project execution. The terminal evaluation rates the performance of the implementing agency for this project, the World Bank, as satisfactory. The project's results were delivered on time, and within the budget, and the project outcomes were rated as either meet or exceeding expectations. Project monitoring was carried out by World Bank supervision missions. Internal evaluations were carried out twice-yearly by an Oversight Committee. Overall, the project was well designed and well supervised.
c. Quality of Execution – for Executing Agencies[4] (rating on a 6 point scale) HS
Briefly describe and assess performance on issues such as focus on results, adequacy of management inputs and processes, quality of risk management, and candor and realism in reporting by the executive agency. As noted in the 2005 report, the execution of the project by the Colegio de Postgraduados de Monticello was reported to be of very high quality. Project management, reliability of procurement administration, financial management, and public involvement all rate as 'highly satisfactory.' The project team remained strongly focused on results, despite some challenges. During the implementation period the project has suffered from 1) a change in Federal and State administration, and 2) the cancellation of the second phase of the Project Rural Development in Marginal Areas. The Coordination team of the project demonstrated resourcefulness and flexibility in overcoming the bureaucratic obstacles posed by these changes. In particular, the CP supported field technicians with individual loans for about 6 months, until new compensation procedures were put in place.

5. LESSONS AND RECOMMENDATIONS

Assess the project lessons and recommendations as described in the TE

a. Briefly describe the key lessons, good practice or approaches mentioned in the terminal evaluation report that could have application for other GEF projects
The following lessons are from the 2001 annual report. **Project Design:** 1. Clear and easily understandable objectives supported by all stakeholders, particularly farmers are important. In this case, carbon sequestration was linked to an efficient use of soil and crop resources, which has generated short-term positive impacts for farmers, thereby enhancing their participation via their own institutions.

[4] Executing Agencies for this section would mean those agencies that are executing the project in the field. For any given project this will exclude Executing Agencies that are implementing the project under expanded opportunities – for projects approved under the expanded opportunities procedure the respective executing agency will be treated as an implementing agency.

2. Well-focused project components with clear team responsibilities, appropriate expertise, and product expectation are necessary. This project had a clear division of responsibilities between the carbon measurement team, the socio-economic and institutional development team, the hillside technical management team, etc.
3. A local dissemination strategy and feedback from farmers and communities was strongly emphasized in this project. Communication in local languages with interpreter support for communities who are not first-hand Spanish speakers is important.
4. Selection of executing agencies on the basis of technical and project management capacity, as well as their people-centered approach is key.
5. Establishment of an efficient Technical Advisory Committee (TAC) with representatives from all the stakeholder groups is important for smooth coordination. In this project, the TAC was headed by a high-rank SAGARPA representative. This ensured the broad participation of all the main stakeholders, and the capacity to make recommendations, which were always taken seriously by authorities and the executing agency.

Project Organization and Implementation:

1. Development of an Operation Manual early on that (i) describes project processes in terms of organization, decision, and monitoring systems; (ii) provides detailed information describing improved technical systems of hillside management; (iii) provides specific methodological recommendations and "know-how" to monitor change in land use and resulting carbon stocks. Such a manual must be flexible enough to permit local adaptation to specific biophysical and socio-cultural circumstances. The best way is to start with a rather short OM that is periodically updated during supervision missions as the implementation progresses.
2. Provide specific training at the onset to project team members, especially on financial and accounting matters to ensure efficient flux of project funds and facilitate financial monitoring and auditing.
3. Appoint an experienced person to manage the project and broaden it to the national level. The leader needs to fully understand the objectives of the project; to generate enthusiasm, commitment, and positive cooperation among team leaders, while paying tribute to the contribution of all stakeholders. This leadership is required at the onset of project preparation to facilitate interaction with the World Bank and other financial agencies.
4. Appoint a WB task manager with technical/scientific knowledge and experience to mange this type of targeted-research project. Such task manager should also have project managerial skills, and the capacity to understand the national team's point of view.
5. Establish two levels of coordination and leadership, one on overall management, vision and linkage with outside agencies, the other on operations. The operational coordinator must be an experienced practitioner with recognized technical and scientific experience and ability to develop participative field works with farmers and their existing organizations.
6. Select "champions" both within farmers and front line agents (from research and extension). Such champions are key to adapting improved hillside management systems locally and stimulate adoption of new systems within rural communities. They are expected to be the interface with rural finance organizations to meet communities and farmers' needs.
7. Local academic institutions were quite efficient in contributing to all the socioeconomic and impact surveys and to the dissemination of the project goals and objectives in local languages, particularly in the Mixe region where a majority of indigenous population does not speak nor understand Spanish.

b. Briefly describe the recommendations given in the terminal evaluation

From the 2001 report:

1. Ensure periodic production of progress reports, not only directed to WB supervision needs, but mostly to all stakeholders in order provide feedback on the progress made.
2. Continue to propose and adjust easily measurable targeted activities and trigger indicators jointly with the national project team.
3. Produce short supervision reports, written in national language with list of specific consensual actions to be taken, rather than recommendations.

From the terminal evaluation:

1. Medium-sized projects are supposed to be less demanding in terms of financial management and control, although there is often a natural trend by the financial officers to follow the full procedure of control and audits, which may become burdensome and very costly for a US$750,000 5 year project.

2. Time is a critical factor in projects involving changing land use patterns, as these projects require a long-term mindset on the part of all stakeholders. The project manager's role in these projects is central, particularly his ability to ensure that during the long months and years of implementation, the main objectives of the project are not diluted and lost.

6. QUALITY OF THE TERMINAL EVALUATION REPORT

6.1 Comments on the summary of project ratings and terminal evaluation findings based on other information sources such as GEF EO field visits, other evaluations, etc.

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 document GEF Office of Evaluation Guidelines for terminal evaluations review for further definitions of the ratings. Please briefly explain each rating.

6.2 Quality of the terminal evaluation report	Ratings
a. To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives? The terminal evaluation contains an extremely brief assessment of outcomes and impacts.	U
b. To what extent the report is internally consistent, the evidence is complete/convincing and the IA ratings have been substantiated? Are there any major evidence gaps? The report is internally consistent, but contains no detail.	U
c. To what extent does the report properly assess project sustainability and /or a project exit strategy? The report does not contain only a passing mention of sustainability. No exit strategy is proposed.	U
d. To what extent are the lessons learned supported by the evidence presented and are they comprehensive? The TE does provides little evidence to support the few lessons learned.	U
e. Does the report include the actual project costs (total and per activity) and actual co-financing used? No actual project costs are mentioned.	U
f. Assess the quality of the reports evaluation of project M&E systems? No assessment of M&E systems in the TE.	U

7. SOURCES OF INFORMATION FOR THE PRERATATION OF THE TERMINAL EVALUTION REVIEW REPORT EXCLUDING PIRs, TERMINAL EVALUATIONS, PAD.

8 Project stakeholders and Key Contacts (Names, addresses, emails etc – mandatory for field visit countries)

9. Information Gaps (for Field visit countries only)