Terminal Evaluation Review form, GEF Evaluation Office, APR 2013

1. Project Data

Summary project data			
GEF project ID		2356	
GEF Agency project ID		88009	
GEF Replenishment Phase		GEF-3	
Lead GEF Agency (include all for joint projects)		World Bank	
Project name		Ecosystem Restoration of Riparian Forests in Sao Paulo	
Country/Countries		Brazil	
Region		LAC	
Focal area		Land Degradation	
Operational Program or Strategic Priorities/Objectives		OP 15 - SLM	
Executing agencies involved		State Secretary of Environment (SMA) – Sao Paulo State, Gov. of Brazil; State Secretariat of Agriculture and Supply (SAA); State Rural Extension Company (CATI)	
NGOs/CBOs involvement		Beneficiaries	
Private sector involvement		Beneficiaries	
CEO Endorsement (FSP) /Approval date (MSP)		01-Jun-2006	
Effectiveness date / project start		08-Sep-2005	
Expected date of project completion (at start)		31-Jan-2010	
Actual date of project completion		27-Apr-2011	
Project Financing			
		At Endorsement (US $M)	At Completion (US $M)
Project Preparation Grant	GEF funding	0	0
	Co-financing	0	0
GEF Project Grant		7.75	7.75
Co-financing	IA/EA own	0	0
	Government	11.77	14.02
	Other*	0	0
Total GEF funding		7.75	7.75
Total Co-financing		11.77	14.02
Total project funding (GEF grant(s) + co-financing)		19.52	21.77
Terminal evaluation/review information			
TE completion date		27-Oct-2011	
TE submission date			
Author of TE		Erick C. Fernandes	
TER completion date		28-Jan-2014	

TER prepared by	Pallavi Nuka
TER peer review by (if GEF EO review)	Joshua Schneck

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

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF EO Review
Project Outcomes	S	S	MU	S
Sustainability of Outcomes	NA	L (Low Risk)	ML	L
M&E Design	S	UA	MU	S
M&E Implementation	S	UA	MU	MS
Quality of Implementation	S	MS	MU	MS
Quality of Execution	S	S	MS	S
Quality of the Terminal Evaluation Report	NA	NA	S	S

3. Project Objectives

3.1 Global Environmental Objectives of the project:

(ProDoc): The global environmental objective is to arrest and reverse land degradation processes in riparian ecosystems in Sao Paulo and adjacent agro-ecosystems by increasing on-the-ground investments and strengthening policy, regulatory, economic, and institutional incentive framework to encourage sustainable land management, hence increasing carbon sequestration and restoring ecosystem stability, functions and services. Past policies promoted clearing and cultivation of floodplains and riparian ecosystems to boost yields. Although not all of these areas are still until active cultivation, they are devoid of any significant vegetative cover, leading to excessive soil erosion and sedimentation of adjacent aquatic ecosystems.

3.2 Development Objectives of the project:

(ProDoc): The development objective is to support long-term and large-scale restoration of riparian forests of Cerrado and Atlantic Forest biomes through development and harmonization of policy, regulatory, economic and technological tools and mechanisms, while providing opportunities for improved livelihoods and economic well-being of rural communities.

The project had 5 components, roughly corresponding to 5 expected outcomes.

1. Policy Development to establish realistic legal, technical, financial and economic frameworks for the future implementation of a state-wide riparian forests restoration program.

2. Support to Sustainable Riparian Forest Restoration ensuring the development and field testing of techniques for riparian forest rehabilitation and restoration, and improved market supply of native seeds/seedlings of the required quantity and quality to achieve long-term restoration goals.

3. On-the Ground Investments in SLM Practices for financing the promotion and dissemination of tested SLM practices (zero-till agriculture, terracing, gully stabilization etc), and pilot restoration activities via on-the-ground investments in selected micro-watersheds.

4. Environmental Education and Training to establish the basis for participation of local populations in planning and implementing local/regional development and conservation activities focusing on better quality of life from the use of SLM.

5. Project Management, Monitoring and Evaluation, and Information Dissemination

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

Neither the GEO, the PDO, or the components were revised. However a few targets, including a Key Performance Indicator (KPI), were lowered. The number of seed production centers was reduced from two to one, in-line with the State's new policy to promote seed production by the private sector instead of publicly run centers and also toreduce costs. The number of hectares of riparian forest to be restored (a KPI) was reduced from 1,500 ha to 500 ha. The Mid-term Review found that, given the project's pilot nature, the demonstration effects could be judged from the smaller area. Also, cost per hectare of restoration activities was proving to be higher than expected, so the number of hectares was lowered. The number of new riparian forest rehabilitation systems tested and publicly disseminated was considered more relevant and the project was judge to be on track to meet that indicator.

4. GEF EO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings. Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors. Please justify ratings in the space below each box.

4.1 Relevance	Rating: **Satisfactory**

The project was consistent with the World Bank's Country Assistance Strategy (CAS) of 2001-07 for Brazil, contributing to long-term national goals of better water quality and water resources management, as well as SLM, forests and biodiversity conservation. The project directly supported the Environment and Natural Resource Management pillar of the World Bank's Country Assistance Strategy (CAS). The project was also consistent with the GEF Operational Strategy and specifically with the Operational Program (OP) for SLM (OP15). It supports both SLM Strategic Priorities for targeted capacity-building and implementation of innovative SLM practices. The project was also relevant to OP3 concerning Forest Ecosystems.

4.2 Effectiveness	Rating: **Satisfactory**

The TE report finds that the project successfully met the overarching environmental and development objectives, and that project outcomes and outputs were in line with the revised expectations. According to the TE report, the project's most important and durable achievements were: (i) the development of legal, strategic and technical tools to facilitate scaled up riparian forest restoration and sustainable land management; and (ii) their proven potential to physically reduce and reverse land degradation in riparian ecosystems and adjacent agro-ecosystems state-wide. The Project developed the regulatory and substantive basis for statewide use of Payments for Ecosystem Services (PES) to address conservation problems by supporting the introduction of legislation, approved in late 2009, enabling the use of PES (previously barred by legal constraints) and field-testing PES in two micro-catchment areas.

About 400 ha of riparian forest (post-MTR target of 500 ha) were restored in 15 micro-catchments, increasing carbon sequestration, and improving ecosystem functionality, stability and services. The project did not meet its seedling targets – the complexity of the seed/nursery sector was under-estimated. But the production and availability of native species seedlings did rise sharply from mid-decade. There are promising, preliminary indications of the potential of the SLM techniques adopted over some 32,000 ha to improve livelihoods and wellbeing. Economic and financial analysis conducted by the FAO found that project SLM activities were economically and financially profitable with the income of farmers who adopted them increasing by 16% to as

much as 157%, equivalent (at that time) to some US$1,400 to US$6,600 per year, per farmer. Yield increases ranged from 23.5% (cotton) to 100% (dairying) over five years.

The project also had catalytic effects that benefitted the broader environmental and development goals of the CAS. A collaborative dialogue evolved between the environment and agriculture sectors through the new relationship between SMA and SAA/CATI. SMA developed partnerships with many institutions and entities including The Nature Conservancy, and many decentralized partnerships with municipal authorities, academia, and NGOs. Technical capacity in the SMA was enhanced through creation of a new office, Coordinator for Biodiversity and Natural Resources, and improved management and monitoring processes were put in place a result of project implementation.

The TE report also cites 'multiplier effects' of the project: (i) Beyond the project, numerous micro-catchment communities, NGOs and municipal governments started developing Riparian Forest Restoration Projects based on project experiences and models and using other public and private funding (see Annex 2); (ii) Micro-catchment Plans (and individual farm plans) prepared for project activities integrated with the LM III (an existing project micro-financing SLM) and facilitated the integrated provision of public services in rural areas, helping farmers initiate restoration activities within a logical framework; (iii) Riparian forest restoration was institutionalized in the State Government's Multiyear Development Plan (PPA, 2008-11) as a critical strategic environmental element with the potential for funding support from carbon credits or voluntary compensation and accorded similar status in the State's new draft PPA (2012-2015); and, (iv) the Project was the stimulus for the "Riparian Areas Communication" tool designed to register and monitor the status of riparian areas on private properties. Farmers must indicate when registering that they understand the need to preserve such lands and that they will at minimum, leave them unutilized and under regeneration. This register now contains some 400,000 ha.

4.3 Efficiency	Rating: **Satisfactory**

The project was completed with a 15-month extension and full disbursement of the GEF grant amount. Although not all the original targets were achieved, the TE report finds that the project was very cost-effective. There were some cost-overruns due to the delay and due to some initial underestimation of costs in the project budget, but these were borne by the state government. Carbon sequestration from plantings in the Demonstration Projects was estimated at 414 tons of CO_2 per ha (Martins et al, 2009) resulting in the potential sequestration of about 148,000 tons of CO_2 and 172,000 tons of biomass in the area restored under the Project and an additional 497,000 tons of CO_2 in areas where restoration is being financed by other entities. The SLM activities supported by the LM III and the PRMC were found by the LM III ICR to be financially and economically viable, with an IRR of 27%. No ex-post project IRR was estimated for the project as a whole.

4.4 Sustainability	Rating: **Likely**

The TE report does not find any significant risks to the sustainability of project outcomes.

Financial: According to the TE report, the state government has committed to the envisaged scale up of key project elements through follow-on activities. The state government is also committed to supporting the necessary legal and regulatory framework, which established PES, PEMC and other institutional instruments designed to facilitate/finance riparian forest restoration and SLM state-wide and at much greater scale.

Institutional: A legal, regulatory and planning framework for SLM has been established and field-tested. Institutional capacity for SLM has been enhanced and relationships between the SMA and SAA/CATI have been improved. Water Basin Committees have been incorporating riparian forest restoration targets in their Watershed Plans from 2005.

Socio-political: The project engaged a broad range of stakeholders from NGOs, private sector, and government agencies. Collaboration with the Sustainable Rural Development and Access to Markets Project extended the

project's reach and influence. The TE report notes that local cooperatives are increasingly involved in riparian forest restoration activities. Restoration activities have drawn on a specialized, locally-sourced labor force which has boosted local employment/income and commitment to conservation, and they have absorbed surplus labor from the sugarcane industry.

Environmental: No environmental risks were noted.

5. Processes and factors affecting attainment of project outcomes

5.1 Co-financing. To what extent was the reported co-financing essential to the 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 so, in what ways and through what causal linkages?

The GoSP's actual cofinancing contribution (cash and in-kind) exceeded the appraisal estimate by 47% as Components 3 and 5 exceeded their original estimates by 23% and 88% respectively due to a combination of US Dollar/Real exchange rates, domestic inflation in the costs of materials and equipment, and under-estimation at appraisal of the costs of restoration activities. The actual cofinancing was almost 2/3 of total project and critical for successful implementation of the SLM incentive schemes.

5.2 Project extensions and/or 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 so, in what ways and through what causal linkages?

The project closed 15-months later than expected. The extension, granted by the Bank, was necessary for the project to complete some demonstration activities and launch the PES program. At project start-up, SMA (the EA) had insufficient technical and administrative personnel, slowing the execution of important activities and limiting engagement with project partners. As such, actual project implementation was severely delayed until a new implementation strategy involving a large contract with a consulting firm was devised and agreed with Government authorities and the Bank. Further, in the initial years, few of the local institutions or technicians contracted had experience in riparian forest restoration, and some had no experience of rural extension. The restructuring of SMA in 2008/2009 helped to alleviate this problem through the contracting of a 150 technicians (paid by State budget, not the Project) half of whom were stationed in regional centers to be trained and to operate closer to the farmers.

5.3 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:

According to the TE report, the project garnered interest and support from a broad range of community and government stakeholders. The State Government was fully committed and had already created the State Forum for Climate Change and Biodiversity. In addition, the State: (i) established a high level Inter-Agency Coordination Committee to facilitate integration between this project and the LM III; (ii) mobilized stakeholders including the State Environmental Council (CONSEMA) and five multi-sector river basin committees to establish water resources management priorities in their respective basins; (iii) promoted collaboration between SMA and SAA on project preparation; and (iv) included this project and LM III in the State's Portfolio of Priority Projects, attracting additional support for the release of project funds, monitoring and impact evaluation, and other aspects. The State's strong counterpart funding performance throughout project execution and full support for efforts to introduce PES underscored its sustained commitment.

6. Assessment of project's Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this

M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

6.1 M&E Design at entry	Rating: **Satisfactory**

The PAD contained a detailed and well-conceived monitoring and evaluation strategy based on the Results Framework, lessons learned from SLM projects in southern Brazil, and ongoing experimental projects in degraded land restoration in the state. Monitoring was to be participatory and cover progress and impacts. A M&E Plan was included in the Operational Manual. Sub-component 5.1 financed the establishment of a Physical and Financial Monitoring System (SAFF) in CATI that would allow online Web-based follow-up of project progress for executors, financiers, beneficiaries and other stakeholders.

The TE report finds that the Project Impact Monitoring Plan was ambitious, seeking to provide information on the results and effectiveness of activities under each component, focusing on the DPs and leading to conclusions on the methodology needed for large-scale restoration of riparian forests.

6.2 M&E Implementation	Rating: **Moderately Satisfactory**

The MIS was established and included collection of financial, managerial, and progress data. The TE report notes that establishing an effective system for monitoring of project activities and results was challenging due to difficulties integrating project M&E with CATI's SAFF System. Eventually the goal of integration was abandoned, and SMA alone managed the project's M&E system and activities thereafter. The TE report finds that the M&E plan implementation was 'flawed' not just because of the problem with integration, but also because the M&E system (in the opinion of the TE) was not used effectively as a tool for results monitoring and reporting to promote rapid scaling-up of the various demonstration activities.

An MTR evaluation was conducted in Jan 2009. The TE report notes that the MTR was "influential in prompting a broad exchange of ideas and experiences between local associations resulting in a consolidation and standardization of best practices, re-design of some activities and improved management, as well as the formation of a network of associations and regular dialogue."

The project also produced a Final Report, an environmental perception study supporting the PES Pilot Project, and a final evaluation. The Project funded an a number of research studies, papers, diagnoses and guidance notes supporting field practices, monitoring methodologies and policy formulation. Dissemination was conducted through national, regional and local symposia, workshops and seminars and through various media instruments for both specialist and lay audiences.

7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

7.1 Quality of Project Implementation	Rating: **Moderately Satisfactory**

The project design was innovative and well aligned with the existing LM III project, which allowed for overall cost-savings and synergies. However, the TE report also finds that the project design was overly ambitious, operating

on ‘too many fronts simultaneously’. The design also overestimated technical capacity, manpower, and the level of institutional cooperation/coordination within state government. This led to delays getting activities off the ground and an underperforming M&E system.

The selection of executing agency was appropriate. Supervision and oversight by the Bank was deemed modestly satisfactory by the TE report. The Bank could have acted more quickly in the project’s first year to get activities off the ground. But it took over one year for the Bank to bring in the necessary outside expertise (a consulting firm) to push the project along. However, Bank staff did collaborate closely with the project team throughout implementation, provide technical assistance on various activities, and supervise management through field missions and the MTR. The Bank also granted the needed project extension and agreed to revised targets following the MTR. This allowed the project to achieve most of its objectives.

7.2 Quality of Project Execution	Rating: **Satisfactory**

Based on information in the TE report, the executing agency/client was successful in implementing a difficult and complex project. Joint implementation (SMA and SAA/CATI) was initially challenging, but eventually led to successful inter-agency collaboration and dialogue that bodes well for sustainability of outcomes. Adaptive management by the PMU is commended. The PMU managed to fully mainstream the project within SMA resulting in significantly enhanced technical capacity at the state and local levels. CATI played a critical role in reaching out to farmers through its extension services network. As noted above, at project start-up, SMA had insufficient technical and administrative capacity, severely delaying implementation, until the Bank brought in an outside consulting firm. Initially few of the local institutions or technicians contracted had experience in riparian forest restoration, and some had no experience of rural extension. The restructuring of SMA in 2008/2009 helped to alleviate this problem through the contracting of a 150 technicians (paid by State budget, not the Project) half of whom were stationed in regional centers to be trained and to operate closer to the farmers.

8. Lessons and recommendations

8.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

1. Mechanisms must be designed up front for formalizing partnerships and integrating inter-sectoral efforts for environmental conservation projects which experience demonstrates, tend to require shared implementation.

2. Monitoring, evaluation and dissemination can have a material impact on a project's ability to detect and resolve critical issues affecting immediate execution and to support future, large scale efforts.

3. Related to this, project teams need to focus intensively on the developmental objectives of GEF operations and ensuring that key indicators adequately capture their intent and are measurable.

4. The project demonstrated early on that a standardized approach to SLM and riparian forest restoration activities breeds delay and inhibits innovation.

5. Traditional media can play an important role in fostering farmers' participation in and adherence to riparian forest restoration but they are not necessarily the most efficient.

6. Intensive support to policy-makers using field-based experiences and results is essential for the development of targeted legal and policy frameworks and builds institutional capacity.

8.2 Briefly describe the recommendations given in the terminal evaluation.

No recommendations were presented in the TE report.

9. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria	GEF EO comments	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The TE report provides detailed and comprehensive assessment of outcomes and impacts relative to objectives and expected outcomes.	HS
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	No inconsistencies were noted and the ratings are well substantiated by the evidence presented on project implementation.	S
To what extent does the report properly assess project sustainability and/or project exit strategy?	The project assesses financial, institutional, political risks to sustainability, and reviews the exit strategy.	S
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The lessons learned draw on project implementation and they are comprehensive.	S
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The report presents actual costs in total and by component, as well as an economic and financial analysis.	HS
Assess the quality of the report's evaluation of project M&E systems:	The assessment of the project's M&E system is brief and summarizes the main points with regard to M&E design and implementation well. More details on the difficulties implementing the M&E system would have clarified exactly how the M&E implementation was lacking.	MS
Overall TE Rating	The TE report is well written. It provides an excellent assessment of project implementation and the level of achievement of project objectives. All key elements of the TE evaluation are included. However, the front matter (ratings summary, disbursement profile) is missing from the copy of the ICR reviewed here, hence some TE ratings are noted as NA.	S

TE Quality = (.3*(6+5)) + (.1*(5+5+6+4)) = 5.3 = S

10. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).