1. Project Data

	Su	immary project data			
GEF project ID		3386			
GEF Agency project ID		2120			
GEF Replenishment Phase		GEF-4			
Lead GEF Agency (inc	lude all for joint projects)	UNDP			
Project name		SIP: Innovations in Micro Irr	SIP: Innovations in Micro Irrigation for Dryland Farmers		
Country/Countries		Senegal			
Region		Africa			
Focal area		Land Degradation			
Operational Program Priorities/Objectives	or Strategic	SP-1: Agriculture			
Executing agencies in	volved	ENDA/LEAD			
NGOs/CBOs involven	nent	ENDA/LEAD (international NGC	D) – lead executing agency		
Private sector involve	ement	NA			
CEO Endorsement (FSP) /Approval date (MSP)		July 2009			
Effectiveness date / p	project start	June 2010			
Expected date of pro	ject completion (at start)	October 2011			
Actual date of project	t completion	November 2013			
		Project Financing			
	1	At Endorsement (US \$M)	At Completion (US \$M)		
Project Preparation	GEF funding	0	NA		
Grant	Co-financing	0.04	NA		
GEF Project Grant		0.910	NA		
	IA own	0	NA		
	Government	0.25	NA		
Co-financing	Other multi- /bi-laterals	0.15	NA		
	Private sector	0.075	NA		
	NGOs/CSOs	0.525	NA		
Total GEF funding		0.910	NA		
Total Co-financing		1.04	NA		
Total project funding (GEF grant(s) + co-fin		1.95	NA		
	Terminal ev	valuation/review informatio	n		
TE completion date		July 2014			
Author of TE		Dr Juliette Biao Koudenoukpo			
TER completion date		March 8, 2016			
TER prepared by		Caroline Laroche			

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF EO Review
Project Outcomes	S	HS		S
Sustainability of Outcomes		L		UA
M&E Design		NR		S
M&E Implementation		NR		S
Quality of Implementation		NR		S
Quality of Execution		NR		S
Quality of the Terminal Evaluation Report				MS

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The Bakel Region of Senegal is facing acute water scarcity. There is a clear need for more effective strategies to manage water resources. To date, "fragmented objectives and sectoral approaches have addressed irrigated agriculture in isolation rather than embedded within the context of more effective community-based land use planning and decentralized management of natural resources. Natural Resource Management (NRM) is poorly considered in Local Development Plans, while communes and local communities lack adapted tools to protect, develop and manage their ecosystems" (PD p.5).

The project aims to develop better tools to improve land and water management techniques. The environmental goal of the project is "to contribute to sustainable land management in order to maintain and improve ecosystem health, stability, integrity, functions and services, and at the same time support sustainable livelihoods in Senegal." (PD p.9)

3.2 Development Objectives of the project:

More specifically, the project objective is "to demonstrate and replicate innovative, indigenous and sustainable small-scale irrigation practices within a context of integrated land use planning" (PD pp.9-10). To do so, the project focuses on three components:

- 1. Capacity building;
- 2. Investment in micro-irrigation and SLM; and
- 3. Learning, evaluation and adaptive management.

(PD p.10)

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

There were no changes in the project's objectives or activities during implementation.

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
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The TE rates relevance as satisfactory. This TER also rates relevance as satisfactory due to the project's importance in solving critical watershed management problems in Senegal and due to its good alignment with the GEF's objectives under the Land Degradation focal area.

Senegal has already taken action to combat desertification and promote better watershed management. In West Africa, the "Africa Water Resources Management Initiative, the Soil Fertility Initiative (SFI), and the Network for the Integrated Management of International River, Lakes and Hydro-geological Basins in Africa, all support integrated watershed management and prevention of land degradation" (PD p.7). Senegal has so far mostly tried to solve its water management issues through large-scale irrigation interventions which, while successful at increasing crop production, had substantial negative environmental consequences, inclusive the creation of floods In the Bakel region. However, small-scale irrigation is not covered in these programs, nor is it covered as part of Senegal's national programs. This project will aim to try a new way of solving watershed management problems in Senegal. It is well aligned with Senegal's national strategy to combat desertification and reduce poverty.

The project is also well aligned with GEF priorities under the Land Degradation focal area. Indeed, the program falls under the Strategic Investment Program for Sustainable Land Management in Sub-Saharan Africa (SIP/SLM) and supports the Land Degradation SP-1 on agriculture. Its activities focusing on microirrigation and sustainable land management are directly in line with the GEF objectives.

4.2 Effectiveness	Rating: Satisfactory	
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The TE rates project effectiveness as highly satisfactory mostly due to the land area now benefiting from micro-irrigation being five times as high as expected in the original project design. This TER rates effectiveness as satisfactory: while some important project targets have been exceeded, other planned activities have not been completed. Project achievements under each of the planned outcomes are assessed below.

Outcome 1: Capacity building

Under this project component, about 300 farmers and herders were trained in SLM and small scale irrigation. A national database of successful micro irrigation practices in the sub-region has been created, although it is not clear that the database is being maintained. Institutional capacities for SLM have been strengthened, and an advocacy note has been written to MPs of the Bakel region asking for the government to promote SLM and micro-irrigation practices. Finally, monitoring methodologies have been developed for carbon sequestration evaluation and monitoring. Planned objectives under this outcome have been met, except for one related to the integration of SML and micro-irrigation into community land use plans, which has not been met.

Outcome 2: Investment in micro-irrigation and SLM

Several activities were realized under this outcome, but the TE was not able to measure achievements against planned outcomes due to some poorly formulated indicators and the difficulty of collecting the data. Several micro-irrigation pilot schemes were set up, and land productivity was increased by an average of 40% on pilot sites. About 200 individual sites have started implementing SLM practices.

Outcome 3: Learning, evaluation and adaptive management

The project was assessed by the TE to have been very effectively delivered. More details will be provided in the following sections on efficiency and project execution. Learning and knowledge sharing activities were very successful, and the project actually generated a lot of interest from stakeholders. It is estimated that about 300 individuals visited the various pilot sites. This has greatly contributed to enhancing the awareness level on the potential of micro-irrigation. However, a document on good practices related to micro-irrigation and SLM was not published as planned.

Overall Assessment

Based on the TE's assessment, about 80% of the planned activities have been realized and have been effective in solving the problems the project was targeting (TE p.31).

4.3 Efficiency	Rating: Satisfactory
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The TE rates efficiency as satisfactory due to the ability of the project team to use adaptive management to keep the project on course. This TER also rates efficiency as satisfactory based on the limited information provided in the TE.

The TE unfortunately provides very little detail regarding project efficiency. It reports that planned costs were respected and that the project team was able to develop a new project implementation timeline after the project start was delayed. Financial management appears to have been sound, but no cost-effectiveness measures are provided, nor has a cost-benefit analysis been performed.

4.4 Sustainability	Rating: Unable to Assess
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The TE rates sustainability as likely, but does not provide a convincing justification for this rating. The section on sustainability discusses the way in which capacity-building activities done as part of the project have increased the project's sustainability (TE p.32), but does not discuss future funding, project exit strategies or any other risks to sustainability. PIRs and other project documents submitted as part of this TER also do not contain any additional information that could be used to make an assessment.

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?

Much of the co-financing that was expected as part of the project was not received (TE pp.41-43). The TE does not specify exactly how much co-financing was received, but explains that the co-financing received was in-kind. It is unclear why co-financing agreements were not respected. Project outcomes were nonetheless satisfactorily achieved, and the TE does not propose that they could have been greater had the full co-financing amount expected been received.

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?

There was a six month delay in project start (TE p.43). The project was eventually extended by two years to ensure the implementation period was long enough to allow for the execution of project activities.

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:

The TE and other project documents do not provide sufficient evidence to assess country ownership. The Government of Senegal was not officially involved in this project, and there is no evidence of their support for the project.

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
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The TE does not rate M&E design. This TER rates it as satisfactory due to the project M&E featuring all the necessary components of a standard M&E framework.

The Project Document (p.11) presents only a basic structure for M&E, and admits that the detailed schedule of M&E activities will largely be determined during the inception period. However, despite the details lacking, the PD mentions that the project will feature all standard M&E components, including an inception workshop, a mid-term evaluation, a final evaluation as well as a range of regular monitoring outputs to be delivered during project implementation.

The project logframe presented in the Project Document (p.18) is complete and specific, and features indicators that for the most part respect the SMART criteria. The logframe also contains baseline data, sources of verification and assumptions for the achievement of targets. Some of the indicators proposed (for example, crop productivity) are underspecified in the Project Document, but this did not appear to cause any issue during M&E implementation.

6.2 M&E Implementation	Rating: Satisfactory
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The TE does not rate M&E implementation. This TER rates it as satisfactory due to the project implementation unit having apparently met all its M&E requirements during the course of the project.

According to the TE, " the implementation unit perfectly played its M&E role during project execution. It also played an important role in shaping the strategic orientation of the project and in ensuring adaptive management of the project" (TE p.39). Indeed, PIRs appear to have been written every year, and the

mid-term and final evaluation activities took place as planned. For this reason, a rating of satisfactory is assigned.

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: Satisfactory	

The implementing agency for this project was the UNDP. The TE does not rate project implementation. This TER rates the implementing performance of the UNDP as satisfactory.

According to the TE, "the UNDP provided all the necessary support to this project. The UNDP took part in all project monitoring meetings and provided all the guidance necessary for the success of the project." (TE p.44). In addition, the TE describes the administrative support provided by the UNDP as satisfactory and regular. The UNDP was able to develop effective partnerships with other state organizations and other related projects, which contributed to the successful delivery of this project. Project design was also strong, and no oversight or weakness was reported.

7.2 Quality of Project Execution	Rating: Satisfactory
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The execution arrangements for this project were unusual, with an international NGO in charge of execution. Indeed, the execution agency for this project was the NGO ENDA-LEAD – Environmental Development Action in the Third World. The TE does not rate project execution. This TER rates project execution by ENDA as satisfactory, largely because the TE and other project documents do not provide any criticism of their work as part of this project.

The TE describes ENDA-LEAD as having been "dynamic and effective", and as having been " able to change negative stereotypes related to NGOS, reinforce their credibility, and was able to integrate the local producer network" (TE p.28), which contributed to good project outcomes. The executing agency was autonomous in their actions, which allowed them the flexibility to make changes to the program plan and ensure its better implementation. Overall, ENDA-LEAD appears to have performed all of its

duties as executing agency and have displayed the flexibility necessary to effective program management.

8. Assessment of Project Impacts

Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

In its pilot areas, the project improved the productive sustainability of drylands, enhancing water-use efficiency and reducing soil erosion in micro-catchments under small-scale irrigation. This provides a sustainable alternative to large-scale irrigation practices that cause land degradation. At this point, those benefits are limited to pilot areas and have not been scaled up.

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered.

In the pilot area, land productivity has increased, and it is "now possible to grow vegetables year round" (TE p.33). This has, according to the TE, contributed to diversifying revenues and to improve the well being and social status of poor farmers, especially women. Evaluation interviews also show increased food security and better health, although this has not been rigorously evaluated.

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. "Capacities" include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. "Governance" refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

a) Capacities

Capacity-building was an important component of this project. As part of the project, 300 farmers and herders were trained in SLM and small-scale irrigation. A national database of successful micro irrigation practices in the sub-region has been created. Institutional capacities for SLM have been strengthened and SLM, and an advocacy note has been written to MPs of the Bakel region asking for the government to promote SLM and micro-irrigation practices. Awareness of the benefits from micro-irrigation was much higher at the end of the project.

b) Governance

This is not relevance to this project.

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

No unintended impacts were recorded for this project.

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to these taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

The pilots implemented as part of this project have not yet been scaled up.

9. Lessons and recommendations

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

The TE proposes the following lessons:

- Choosing a good local partner is essential to ensure the success of a local development program. The local pilot committee was experienced, and this helped with the project.
- 2. Adequate means and tools need to be made available to the local pilot committees.
- 3. Even with modest financial means, good outcomes came be made if local partners are well chosen and capacities are built.
- 4. Micro irrigation can be a good complement to large-scale irrigation. It can help support vulnerable populations if the right institutions are put in place to promote similar initiatives.

(TE pp.44-45)

9.2 Briefly describe the recommendations given in the terminal evaluation.

The TE provides several specific recommendations for ENDA-LEAD:

- o to create a database of best practices and disseminate the information;
- o to improve networking between agricultural producers;
- to continue awareness, information, education and capacity building activities in partnership with community radios and schools;
- o to pursue the implementation of the action plan on carbon sequestration;
- to pursue efforts towards getting the government to include small scale irrigation as part of its watershed management policy toolkit;
- to strengthen the institutions necessary to pursue local small scale irrigation initiatives;
- to advocate to the Government for a clear national SLM and micro irrigation policy;
- to promote agricultural research and to identify good SLM practices which should be disseminated beyond the communities participating in the project.

The TE also provides recommendations for the Senegalese government:

- to develop a project on POPs in the Kenieba region;
- to start implementing some of the findings from the research that was done on carbon sequestration in the context of SLM.

(TE pp.46-48)

10. 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 report adequately assesses the project's various outcomes, and provides a good discussion of the project's achievements.	S

To what extent does the report properly assess projectThe report mentions that sustainability is likely, but does	
sustainability and/or project exit not provide a convincing rationale supporting this rating. strategy?	U
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	S
Does the report include the actual project costs (total and per activity) and actual co-financing used?The report does not provide project costs. Planned financing figures are provided, but realized GEF co- financing figures are missing.	U
Assess the quality of the report's evaluation of project M&E systems:M&E activities for the project are adequately discussed and assessed. The M&E design is discussed but not assessed.Overall TE Rating	MS MS

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

No additional sources were used in the preparation of this TER.