Terminal Evaluation Review form, GEF Independent Evaluation Office, APR 2018

1. Project Data

Summary project data			
GEF project ID		3716	
GEF Agency project ID		1100001054	
GEF Replenishment Phase		GEF-4	
Lead GEF Agency (include all for joint projects)		IFAD	
Project name		Integrating Adaptation to Climate Change into Agricultural Production and Food Security (IACCAPFS)	
Country/Countries		Sierra Leone	
Region		Africa	
Focal area		Climate Change	
Operational Program or Strategic Priorities/Objectives		CCA-1, CCA-2, CCA-3	
Executing agencies involved		Ministry of Agriculture, Forestry & Food Security (MAFFS) [lead EA] Sierra Leone Meteorological Department	
NGOs/CBOs involvement		Various local youth and women's organizations	
Private sector involvement		Private businesses in UK and Germany to provide weather station equipment	
CEO Endorsement (FSP) /Approval date (MSP)		December 21st, 2010	
Effectiveness date / project start		March 23rd, 2012	
Expected date of project completion (at start)		September 2016	
Actual date of project completion		September 2017	
Project Financing			
		At Endorsement (US $M)	**At Completion (US $M)**
Project Preparation Grant	GEF funding	.1	.1
	Co-financing	.1	
GEF Project Grant		2.65	2.65
Co-financing	IA own	7.52	
	Government	.77	.15
	Beneficiaries	.34	0
	Private sector		
	NGOs/CSOs		
Total GEF funding		2.75	2.75
Total Co-financing		8.63	.15
Total project funding (GEF grant(s) + co-financing)		11.48	2.9
Terminal evaluation/review information			
TE completion date		April 18th, 2017	
Author of TE		Not identified	
TER completion date		October 29th, 2018	
TER prepared by		Cody Parker	
TER peer review by (if GEF IEO review)		Molly Sohn	

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	NR	MS	-	MS
Sustainability of Outcomes		S	-	ML
M&E Design		NR	-	MS
M&E Implementation		NR	-	U
Quality of Implementation		NR	-	MS
Quality of Execution		NR	-	MU
Quality of the Terminal Evaluation Report		-	-	S

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The project's global environmental objective was "to reduce the vulnerability of the food supply system to the deleterious impacts of climate change" (Request for Approval, p. 15).

3.2 Development Objectives of the project:

The project's development objective was "to lessen the impact of climate change on vulnerable rural communities, as well as on natural resources critical for sustaining agricultural production and increasing food security" (Request for Approval, p. 15).

This objective was to be realized through three main project components:

Component 1: Sustainable development of climate resilient inland valley swamp (52 % of total project costs). This component included the following outcomes: Participatory mapping and monitoring of vulnerability to climate change; Climate-resilient rice production systems; and Training for local rice producers on best adaptation practices.

Component 2: Integrated water and natural resource management for adaptation (28 % of total project costs). The two outcomes were: Ecosystem-based adaptation in the uplands; and Irrigation efficiency and drainage systems.

Component 3: Capacity building and awareness raising on climate change (9.5 % of total project costs). The comprising outcomes were: Government personnel training; Agriculture climatic data collection and analysis for decision making; and Knowledge and awareness on climate change at community level.

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

There were no changes to the objectives during project implementation.

Due to the outbreak of the Ebola virus in April 2014, staff were severely hindered from moving throughout the country and therefore implementation of many activities was delayed. This led to a one-year extension of the project (TE, p. 3).

The roof rainfall harvesting activity under Component 2 was found to be underperforming and therefore discontinued during the MTR. Remaining funds allocated for this were redirected to a partnership with Njala University to test new water harvesting techniques and anti-soil erosion measures, which showed more promising results (TE, p. 7).

4. GEF IEO 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 TE rates relevance as satisfactory, and this TER also rates relevance as satisfactory.

The goal of reducing vulnerability of the food supply system to climate change and increasing food security is consistent with the overall goal of Sierra Leone's national Agenda for Change. The project is also relevant to GEF's climate change focal area, particularly CC-1.2 Reduce vulnerability to climate change in the development sector, and CC-2.1 Increase knowledge and understanding of climate variability and change induced risks at country level and in targeted vulnerable areas.

4.2 **Effectiveness**	Rating: **Moderately Satisfactory**

The TE rates effectiveness as moderately satisfactory. This TER also rates effectiveness as moderately satisfactory. Although major failings in M&E make it difficult to identify exactly how completely targets were met, and some activities were not completed, it is clear that the project successfully spread awareness of climate change impacts and adaptation capability to a significant number of beneficiaries.

Component 1 largely achieved its desired outcomes of developing 120 hectares of inland valley swamps to increase crop yield and reliability, and trained beneficiaries in adapting to unpredictable rainfall patterns, although with some shortcomings. The vulnerability mapping was carried out, although not as fully as originally envisioned: budgetary concerns precluded the provision of GIS software, and a complicated system of land rights in Sierra Leone made it difficult to identify ownership of many of the

inland valley swamps (TE, p. 6). Unfortunately, the CD on which the vulnerability mapping data was stored was lost due to poor filing practices; while it aided in the execution of the project, its usefulness cannot be extended to further projects (TE, p. 6). Eight of the originally planned 24 consultation sessions to raise CC awareness and discuss adaptation measures were conducted, and this number was deemed by project staff to be sufficient. More importantly, at least 1,794 men, 1,078 women and 6,021 youth were supported through the introduction of new rice seeds which can boost crop output by 59% and double profit margins. Furthermore, 8 of 16 originally planned staff were trained which led to 40 demonstration sites being set up to train 1,000 farmers in solving CC related problems (TE, p. 7).

Overall, Component 2 achieved its goal of furthering ecosystem-based adaptation in the uplands, and though its initial irrigation outputs were replaced, the new water management techniques introduced have been among the project's most successful outcomes (TE, p. 5). Under Component 2, a sustainable land and water management training activity was carried out, training 339 beneficiaries in water management techniques and discouraging slash-and-burn practices. The roof rainwater harvesting activity was discontinued after being 20% completed, due to problems with the procured rainwater tanks and a realization that the activity was not well suited to the context of Sierra Leone. Fortunately, the remaining funds were able to be reallocated to other water management activities such as a micro-catchment and open-field irrigation projects, which have been able to improve soil quality in terms of moisture retention and improve soil structure and nutrient content by reducing topsoil erosion and evaporation. Two greenhouses also established with the redirected rainwater funds have provided less impressive results (TE, p. 16). Another impromptu activity was the construction of four earth dams, which replaced the initially planned irrigation activities following a suggestion made in the 2013 supervisory mission (the reason for this is not clear). The earth dams have shown positive results, storing water and enabling farmers to double- and triple-crop, and farmers have already reported increased water availability (TE, p.9).

Under Component 3, the planned training of government staff was partially successful; postgraduate meteorological training for 2 staff was not achieved due to unwillingness on the part of staff, and only half of the planned meteorological technicians and the Ministry of Agriculture, Forestry and Food Security staff received training. Planned awareness raising and capacity building for women and heads of vulnerable households was also partially completed (180 out of 360 planned.) However, the TE reports that at least the micro-catchment farmers surveyed after the project were still unaware of the destructive impacts of slash-and-burn, so awareness-raising in this regard may have had limited effectiveness (TE, p. 38). For the climate data collection output, only 8 of 15 planned automated weather stations were installed due to an underestimation of their cost in the initial budget. 20 of 20 planned rain gauges were installed at various secondary schools, however, and are also doubling as a learning tool (TE, p. 11).

4.3 **Efficiency**	Rating: **Moderately Unsatisfactory**

The TE rates efficiency as moderately satisfactory. This TER rates efficiency as moderately unsatisfactory, largely due to cost overruns caused by inadequate project planning.

The project ended up on budget overall. However, Component 3 ran 48% over budget, which the TE attributes to higher than expected costs for the automated weather stations, of which only 8 were built of 15 planned, which were "still too expensive" and whose overspending negatively affected the other components: the vulnerability assessment under Component 1 and the greenhouse project under Component 2 were both hindered by budget constraints, and various recommendations made during the MTR regarding sustainable livelihoods outcomes were not implemented (TE, pp. 18, 19, 59). There were also delays in the procurement of the weather stations due to FAO procurement procedures, but it is unclear why the FAO was used for procurement (TE, p. 20). Better project design would have been needed to correctly assess the costs of the automated weather stations and plan for their efficient procurement. Project management and M&E costs ran far over budget at 279% of original allocation. The TE does not go into great detail about the reasons for this, only citing the unforeseen need to hire an extra assistant and "other unplanned operating costs" (TE, p. 25). The project was extended by one year due to the outbreak of Ebola, which affected these costs, but it seems clear that inefficiencies in project management, such as the aforementioned lack of a filing system, are also to blame.

4.4 **Sustainability**	Rating: **Moderately Likely**

The TE rates sustainability as "satisfactory". This TER rates sustainability as moderately likely. Although there are few risks to the sustainability of most project outcomes, the automated weather stations in particular face technical and staffing issues which may jeopardize their long-term utility.

Institutional Frameworks and Governance / Financial Resources: There are serious shortcomings with the availability of skilled personnel to maintain the automated weather stations (TE, p. 32). Furthermore, the chronically underfunded Meteorological Department is a government agency and therefore unable to control its own budget, so it is unclear how the necessary funding for the weather stations' upkeep will be secured. Although there have been discussions in Parliament to make the Meteorological Dept. an independent agency with more power, it is unclear whether or when this will take place (TE, p. 10). Already, one of the eight automated weather stations is broken, while four others, though operational, require spare parts or repair (TE, p. 11). Although a register of fixed assets (e.g., the weather stations) was in place, at the time of the TE there was still no hand-over plan of those assets to the government, district councils, or other actors, adding more uncertainty to the sustainability of those outputs (TE, p. 28).

Sociopolitical: Although farmers were initially resistant to adopting new agricultural practices and avoiding slash-and-burn, the TE reports that by the end of the project beneficiaries were impressed and motivated to continue with the practices introduced by the project (TE, p. 38). Sociopolitical sustainability is therefore likely.

Environmental: The earth dams, despite their positive impacts, have a tendency to overflow during heavy rainfall which can cause erosion and flooding damage (TE, p. 38). IFAD supervision missions recommended the establishment of community dam management committees to deal with this issue, but this has not been carried out (TE, p. 32). Otherwise, there are no apparent environmental risks to the sustainability of project outcomes.

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?

Of the project's planned co-financing of $8,626,000, only $144,966 in tax breaks from the Government of Sierra Leone was actually secured, although the TE notes that due to weakness in quantifying in-kind contributions, the total figure could be higher (TE, p. 14). This project was a component of the broader Rehabilitation and Community-Based Poverty Reduction Project, another IFAD project, and the vast bulk of planned co-financing ($7,520,000) was to be from an IFAD grant/loan, which apparently never came through. In initial project documents the $7,520,000 was budgeted among the various project components, yet the TE fails to address in any way whether and how the absence of this financing impacted the project, making no reference to it whatsoever.

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?

As noted above, the project was extended for one year in recognition of the outbreak of the Ebola virus from May 2014-October 2015 (TE, p. 11). No specific details are available regarding the ways this affected project implementation, but the TE notes "inventory control, ability of staff to supervise and carry out project implementation, repair and maintenance of weather stations, complete international training courses in weather station maintenance and deliver routine onsite data collection" as particularly impacted areas (TE, p. 13).

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 project was implemented by the Ministry of Agriculture, Forestry and Food Security, a government entity. The TE does not note any specific effects on the project due to high or low levels of country ownership; however, the failure to keep the Meteorological Department (which is meant to operate the automated weather stations) adequately funded may be taken as a sign that the project is not being treated as a high priority by the government.

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: **Moderately Satisfactory**

The TE does not assign a rating to M&E design specifically but rates the M&E system overall as moderately unsatisfactory.

The Request for CEO Endorsement lays out a fairly comprehensive plan for M&E, assigning specific roles and budgets. While project implementation measures were kept up to date in a separate logframe for this project, indicators and activities were conflated in the initial logframe (this was remedied during the MTR) (TE, p. 26). The indicators were focused primarily on project implementation rather than outcomes, although they were overall quite SMART as required by GEF guidelines (PD, pp. 99-105). Yield, income, and agricultural productivity data resulting from the project were not included in the indicators, and therefore it was difficult to determine this project's specific impact and the added value of climate change adaptation measures as disaggregated from the overall Rehabilitation and Community-Based Poverty Reduction Project (TE, p. 14). Overall, though, M&E design was relatively satisfactory and most problems with missing M&E data are the result of a failure to follow through with the design.

6.2 **M&E Implementation**	Rating: **Unsatisfactory**

The TE rates the M&E system overall as moderately unsatisfactory. This TER rates M&E implementation as unsatisfactory, due to large deficiencies in reporting as well as general documentation and filing practices.

Both project management and M&E were fully integrated with the broader Rehabilitation and Community-Based Poverty Reduction Project (TE, p. 25). This meant that staff looked to find "synergies" between the two projects in order to avoid being burdened with double reporting, which appears to have caused a laxness in reporting on the results and impacts of this project specifically (TE, p. 26). While procurement plans and contract administration registers were found to be "properly drafted, maintained and updated as required" (TE, p. 28), reporting was largely implementation-focused with little attention paid to outcomes or impacts. Furthermore, there was no archiving or filing system, with a large amount of important documentation kept in unmarked and disorganized boxes (TE, p. 58). As a result, it was nearly impossible for the TE to precisely address how well targets were met, and much of its evaluation was gleaned from the MTR and observation during site visits. For example, the Ministry of Agriculture, Forestry and Food Security was unable to confirm to the TE mission how many of the eight planned community forestry plans were developed, due to a lack of documentation (TE, p. 18).

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's implementing agency was IFAD.

The TE describes IFAD's support in terms of project design, supervisory missions, and country presence as "adequate". Supervision missions were carried out annually, there were no delays in fund transfers, and IFAD was determined to have "largely complied" with financial procedures (TE, p. 19).

However, IFAD's supervision was lacking in some respects. The technical problems now facing the automated weather stations were not picked up on by IFAD supervision missions and could have been avoided if one or two stations had been procured and tested first (TE, p. 27). Furthermore, the data recorded by the weather stations is not being synthesized into a digestible and usable format by the farmers it is meant to benefit. Such problems indicate inadequate planning in the project design phase.

7.2 **Quality of Project Execution**	Rating: **Moderately Unsatisfactory**

The project's lead executing agency was the Ministry of Agriculture, Forestry and Food Security. The National Project Coordination Unit was the executive arm of the Ministry responsible for day-to-day project execution. Project execution is rated as moderately unsatisfactory due to relatively haphazard practices on the part of the Project Coordination Unit which caused various avoidable problems.

The rainwater harvesting project, which was found to be unsuitable and ineffective, was only discontinued after it had been 20% completed, and payments for the rain tanks were made in full to the contractor before any evaluation, effectively releasing them from contractual obligations regarding quality and upkeep (TE, p. 17). Technical advice from experts was not sought before or during the contracting process, which might have revealed its flaws before so much of the activity had been completed (TE, p. 17). More funds would have been available for redirection into the activities that replaced the rainwater harvesting if this had been handled in a wiser manner. The post-project transfer of assets to the national and district level government had also not been planned by the time of the TE.

Responsiveness to recommendations made during supervision missions was unsatisfactory, with some being effected later than necessary and some not at all. For example, a recommendation that the Ministry seek to partner with UNDP to upgrade the meteorological infrastructure of the project was

never followed through on (TE, p. 26). Despite these shortcomings, however, the Project Coordination Unit did demonstrate flexibility in restructuring and developing new activities to meet project outcomes when originally planned activities were found to be ineffective, and some of these (e.g. the earth dams) were among the project's most valuable.

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.

No specific quantitative information is reported regarding environmental changes by the end of the project. However, the project is likely to have a positive environmental impact overall due to the introduction of higher-yielding rice and better water management techniques mitigating the need for destructive slash-and-burn agriculture (TE, p. 29).

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 these changes.

While a food security impact assessment has not been carried out, the TE reports a "clear" positive impact in this respect, with beneficiaries already showing improvements in crop yield and diversity as well as soil management (TE, p. 8). The socioeconomic impact assessment states that 33.5% of households in impacted communities reported having the ability to maintain or increase food production in the event of a flooding, compared with 15% in control communities (TE, p. 7).

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

Automatic weather stations and rain gauges were installed with the intention of providing better capacity to predict and prepare for unforeseen weather conditions; however, this data is largely useless as no attempt has been made to convert it into an easily digestible format that farmers could actually understand and use (TE, p. 16). Nonetheless, capacity has been built by educating farmers about sustainable land and water management practices and the dangers of slash-and-burn agriculture.

b) Governance

No notable changes in governance are reported as a result of the 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.

The TE does not report any unintended impacts of the 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.

Despite the identification during the project of some innovations which could benefit from scaling up, such as the contracting of "Service Providers" and "Youth Contractors" to assist in the implementation of various project activities, no initiatives have been identified as actually having been scaled up or replicated in other projects at this point (TE, p. 13).

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 only key good practice identified in the TE that could be applied to other GEF projects was the aforementioned contracting of Service Providers and Youth Contractors in the implementation of project activities. The TE does not, however, detail why this practice was particularly successful.

A key takeaway from this project is the importance of good M&E reporting and analysis, which was hindered by the full integration of M&E for this project with the overarching RCPRP project (TE, p. 15). Future GEF collaborations with IFAD should take care to ensure the implementation of a distinct and rigorous M&E system for the specific GEF-funded project.

9.2 Briefly describe the recommendations given in the terminal evaluation.

- Future projects should take care to avoid the project management, data collection and reporting problems that plagued this project. A rigorous filing system and diligent inclusion of reported data into the M&E framework are necessary to properly assess project impacts.

- The successful micro-catchment activities should be scaled up and replicated in other Ministry of Agriculture, Forestry and Food Security projects.

- The automated weather stations should be targeted for additional support to ensure their functionality and usefulness in disseminating meteorological data to farmers (TE, p. 39).

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 IEO 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?	Faced with a crippling lack of M&E data, the TE mission did an admirable job of thoroughly assessing project outcomes and impacts.	**S**
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The report is consistent and presents convincing evidence but does not go into sufficient detail in addressing the causes for some shortcomings.	**MS**
To what extent does the report properly assess project sustainability and/or project exit strategy?	The report addresses project sustainability thoroughly and convincingly.	**S**
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The lessons learned are supported by evidence but could be clearer and more detailed.	**MS**
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The report includes actual project costs by category and by component, but not broken down by specific activities. It addresses co-financing to some degree but fails to mention the large IFAD grant that does not seem to have materialized.	**MU**
Assess the quality of the report's evaluation of project M&E systems:	The evaluation of project M&E systems is clear and convincing.	**S**
Overall TE Rating		**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 of information were used in the preparation of this TER.