1. Project Data

Summary project data			
GEF project ID	9163		
GEF Agency project ID	-		
GEF Replenishment Phase	GEF-6		
Lead GEF Agency (include all for joint projects)	Conservation International		
Project name	Enabling the use of global data sources to assess and monitor land degradation at multiple scales		
Country/Countries	Global including Kenya, Uganda, Senegal and Tanzania		
Region	Africa		
Focal area	Land Degradation		
Operational Program or Strategic Priorities/Objectives	UA		
Executing agencies involved	Vital Signs, NASA and Lund University		
NGOs/CBOs involvement	None		
Private sector involvement	None		
CEO Endorsement (FSP) /Approval date (MSP)	November 23, 2015		
Effectiveness date / project start	January 1, 2016		
Expected date of project completion (at start)	June 2017		
Actual date of project completion	May 30, 2018		
Project Financing			
		At Endorsement (US $M)	**At Completion (US $M)**
Project Preparation Grant	GEF funding	-	-
	Co-financing	-	-
GEF Project Grant		1.8	1.8
Co-financing	IA own	-	-
	Government	-	-
	Other multi- /bi-laterals	9.3	9.3
	Private sector	-	-
	NGOs/CSOs	0.602	703
Total GEF funding		1.8	1.8
Total Co-financing		10	10
Total project funding (GEF grant(s) + co-financing)		11.8	11.8

Terminal evaluation/review information	
TE completion date	June 2018
Author of TE	Julia E. Latham and Lucy G. Anderson
TER completion date	February 2019
TER prepared by	Spandana Battula
TER peer review by (if GEF IEO review)	Cody Parker

2. Summary of Project Ratings

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

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The Global Environmental Objective of the project was to "provide guidance, methods and toolbox for assessing and monitoring status and trends in land degradation using remote sensing technology which can be employed to inform land management and investment decisions as well as to improve reporting to the UNCCD and the GEF" (PD pg. 14).

3.2 Development Objectives of the project:

The project's development objective was to fill gaps in baseline initiatives to enable countries to produce estimates of land degradation trends, and to develop country capacity in the application of tools and recommended approaches for land degradation assessment using remote sensing (PD pg. 14). To achieve this objective, the project had three components:

Component 1: Methods for assessing and monitoring land degradation at multiple scales;

Component 2: Demonstration of recommended methods and platforms to enable widespread adoption across scales, from the regional to national and local levels; and

Component 3: Gender appropriate capacity development in the application of toolbox and recommended approaches for estimating status and trends in land degradation using remote sensing.

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

The project did not have changes to its objectives or activities.

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 project was relevant to GEF's land degradation focal area and the project's outputs were applicable to GEF's land degradation monitoring and reporting. The TE noted that the project was "inspired by a review commissioned by the GEF STAP on the use of NDVI to monitor land degradation, and was designed to harmonize datasets, methods and tools for assessing land degradation" (TE pg. 22). It was also aligned with national priorities of the pilot countries and their obligations to the UN Convention to Combat Desertification. Thus, the TER gives a Satisfactory rating to the project's relevance.

4.2 **Effectiveness**	Rating: Satisfactory

The TE gave a Highly Satisfactory rating to the achievement of the project's three components. The project developed a significant output, Trends.Earth toolbox, which was helpful in monitoring land degradation. To expand user engagement, the project held workshops and trainings on the toolbox with particular engagement with women. The project also produced baseline reports and collaborated with UN Convention to Combat Desertification. Thus, the TER gives a Satisfactory rating to the project's effectiveness. Below is a detailed assessment of the three project components:

Component 1: Methods for assessing and monitoring status and trends in land degradation:

This component aimed to achieve improved understanding of different global datasets for estimating status and trends in land degradation and have agreed-upon methods for end users. As per the TE, the project produced four reports for monitoring land degradation which had "helped to harmonize data reporting between countries and have informed international best practice guidance on land degradation monitoring methods" (TE pg. 18). The project also produced good

practice guidance on land degradation, recommendations for the Global Benefits Index, and implemented 21 methods such as for productivity state, degradation due to changes in land cover, and assessing degradation due to change in soil organic carbon. The project delivered on all the expected outputs.

Component 2: Demonstration of recommended methods and platforms to enable widespread adoption:

Under this component, the project aimed to complete baseline assessments in the four pilot countries and build platforms for capacity building. The project was successful in completing four baseline reports which were shared amongst stakeholders. As per the TE "The project also developed the Trends.Earth toolbox and a set of associated guidance freely available online. The toolbox fills a unique gap, as previously there was no land mapping tool using data to measure and assess trends related to land degradation. The open-source accessibility of the toolbox also enables many countries to conduct spatial analysis and monitoring where previously there was limited capacity to do so" (TE pg. 19). The project team worked closely with UN Convention to Combat Desertification (UNCCD) are also now conducting training of trainer workshops to expand exponentially the reach of the toolbox and associated guidance to ensure that the toolbox was directly applicable to the Sustainable Development Goals on land productivity, and the project was able to provide a consistent and efficient approach to reporting where previously data harmonization had been problematic. However, the toolbox had limitations on software use and data accessibility.

Component 3: Gender appropriate capacity development in the application of toolbox and recommended approaches for estimating status and trends in land degradation using remote sensing:

Under this component, the project intended to have equitable participation by women and men in accessing and processing data, and exchange knowledge among countries. The project organized workshops on capacity building where 115 women participated, and trained 340 attendees on Trends.Earth toolbox, and it was reported that participants from 140 countries were trained in these workshops. "UNCCD are also now conducting training of trainer workshops to expand exponentially the reach of the toolbox and associated guidance" (TE pg. 21). The TE noted some limitations like ensuring continued maintenance of skills and tools by end users, language barriers in workshops, and difficulty in engaging women as the country focal points were predominantly men.

4.3 **Efficiency**	Rating: Satisfactory

The TE assigned a Satisfactory rating to efficiency of the project and stated that the project was cost-efficient in usage of its funds considering the effective outcome achievements within a short

period of 2 years. The open-access availability of the Trends.Earth toolbox and guidance material would help in benefits lasting longer across temporal and spatial scales. The project faced minor delays in completion of activities, but it adapted its timeline accordingly to ensure that outputs were delivered by end of project. The TE noted that the project was extended for three months due to remaining budget which the project utilized for capacity building by organizing an additional workshop in Kenya (TE pg. 24). Considering time and cost efficiency, the TER also gives a Satisfactory rating.

4.4 **Sustainability**	Rating: Moderately Likely

The TE gave a Moderately Likely rating to sustainability while identifying financial risks to future maintenance of Trend.Earth toolbox, and risks to the impact of the indicators to assess potential land degradation. However, the project had strong socio-political support and no negative environmental risks. Therefore, the TER also gives a Moderately Likely rating to project's sustainability.

Financial: The TE stated that during implementation the project was cost efficient and NASA provided costly datasets to the project through the toolbox. However, there was no mention of future financing and "although use of the toolbox by countries is open source and free, maintaining the toolbox does have associated costs. Integrating new data sources in future, as well as keeping up to date with more users and downloads may see the cost of maintenance increase" (TE pg. 30).

Socio-political: the project had sufficient involvement from main stakeholders. The project engaged with UNCCD and had representative from 140 countries participate in project's workshops. The TE does not identify any risks to socio-political criteria.

Institutional and governance framework: the project had good coordination and communication with UNCCD national focal points and institutions such as the GEF Secretariat which provided strong framework. The TE noted "institutionally, the project has strong technical teams and partnerships which helped the completion of all outputs" (TE pg. 27). However, there were some risks associated with the toolbox which requires continued services from Google Earth which is banned in some countries like China.

Environmental: the project does not have environmental risks to threaten sustainability.

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 materialized co-financing was the same as the original co-financing amount of $10,000,000. The in-kind co-financing from NASA was essential in getting commercial satellite data products and materials on time (TE pg. 45).

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 faced minor delays as NASA took more processing power than had originally been estimated to clean, format and process the high-resolution data, however, the project adapted its timelines to achieve its 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:

Ownership and involvement by stakeholders were high especially from UNCCD and its collaboration on the toolbox.

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 M&E plan consisted of inception workshop and report with a M&E budget of US$74,800. The M&E design had provision for project results monitoring plan, field supervision missions, project implementation reports, quarterly progress reports, and terminal evaluation. The TE noted that the "logical results framework for monitoring of project results was clear, practical and

sufficient given the nature of this project as a research rather than practical field project" (TE pg. 35). The indicators were clear but were less in measuring the number of data sources, indices and methods assessed, and agreements of methods. The TER gives a Satisfactory rating to M&E design at entry.

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

The TE gave a Highly Satisfactory to M&E implementation while noting that "all M&E activities were conducted during project implementation, with quarterly and annual progress and financial reports completed and submitted" (TE pg. 35). The project monitored project results and clearly noted progress in monitoring reports and reported on gender considerations as well. However, the TE stated that "format of the project final report could be improved to allow for a clear overview and comparison of planned with actual project activities, including financial details. However, this is due to a lack of guidance from CI-GEF on the format of the final report, and so the project team modified the Project Implementation Report template" (TE pg. 36). Given the minor flaws, the TER downgrades the rating to Satisfactory.

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

Conservation International was the implementing agency which provided clear oversight over the project. The agency communicated with the project team on reporting expectations, ensured that reporting documents were delivered on time, and provided technical and financial reviews on the reports' contents. It communicated effectively with the executive agencies and put in place safeguard and financial/procurement policies to ensure no conflicts of interest arose. Regarding the formatting of reporting documents, there was criticism to simplify the format to improve efficiency. Thus, the TER gives a Satisfactory rating.

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

The executing agency was Vital Signs, which was given Highly Satisfactory rating because of its effective management of the project particularly given the complex multi-institutions involved. Other executing agencies, UNCCD, and steering committee members praised that Vital Signs informed them regularly on the progress through calls, in-person meetings and brown bag events. It also effectively organized meetings despite difficulty arranging logistics across multiple time zones; and submitted all project reports on time" (TE pg. 38). The executing team divided tasks and objectives among the different partner organizations before and during the inception workshop which helped in implementation. The team also had a scientific advisory committee of international experts on land degradation to review the technical outputs of the project, whose feedback was instrumental in verifying the scientific integrity of the project's outputs (TE pg. 38). Therefore, the TER gives a Satisfactory rating.

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 environmental impacts were reported in the TE.

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.

No socioeconomic changes were reported.

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: the project generated the Trends.Earth toolbox and guidance reports which can be used to inform land management and investment decisions. It also built capacity through workshops, webinars, guidance materials and wider engagement.

b) Governance: the project had influenced the monitoring frameworks used in international policy.

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 noted that "engagement with UNCCD and CSIRO, Trends.Earth became even more applicable to international policy reporting requirements than had originally been envisaged" (TE pg. 34).

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.

GEF initiatives were not adopted at scale.

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 key lessons learnt from the TE were:

a) strong relevance and applicability of toolbox to international policy helped in facilitating wide scale engagement;

b) the project maintained stakeholder engagement through all phases of the project, which maximized relevance and wide scale uptake;

c) there was strong management of the project to ensure minimal delays and cost efficiency;

d) the project would have benefited from a dedicated stakeholder engagement officer for better workshop participation;

e) the project should have factored in buffer time to overcome delays in data processing; and

f) funding for steering committee meetings could have helped to ensure all members were able to partake, and all stakeholder views were heard.

9.2 Briefly describe the recommendations given in the terminal evaluation.

The TE provided the following recommendations (TE pg. 49):

a) Engagement activities should continue into the future, to maximize the relevance and impact of project outputs after project end;

b) Time requirements for processing high-resolution data should be carefully considered, especially for a short (two year) project;

c) Future ownership of key project outputs should be clarified before project end; and

d) Flexibility around the timing of inception workshops to ensure relevant stakeholders are identified and invited

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?	The report contains adequate assessment of the outcomes and impacts and provides appropriate rating.	S
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The ratings are consistent with evidence provided, but some in cases the ratings seemed inflated	MS
To what extent does the report properly assess project sustainability and/or project exit strategy?	The TE well assessed the sustainability as per the criteria and provided ratings accordingly	S
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The lessons learned and recommendations are well presented in the report	S
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The TE provides co-financing information but does provide project costs per component	MS
Assess the quality of the report's evaluation of project M&E systems:	The TE provided sufficient information on M&E system	S
Overall TE Rating		S

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

The TE did not use any additional sources.