

**Enabling the use of global data sources to assess and monitor land degradation at multiple scales
FY16 Project Annual Workplan**

Project Information			
Project Title:	Enabling the use of global data sources to assess and monitor land degradation at multiple scales		
Country(ies):	Global including Kenya, Uganda, Senegal and Tanzania	GEF ID:	9163
GEF Agency(ies):	CI	Duration in Months:	24
Other Executing Partners:	Vital Signs (VS) National Aeronautics and Space Administration (NASA) Lund University	Start Date (mm/yyyy):	01/2016
GEF Focal Area(s):	Land Degradation	End Date (mm/yyyy):	12/2017
Integrated Approach Pilot:		ProDoc Submission Date:	6/17/2015
Name of Parent Program:		Workplan Submission Date:	4/29/2016
Workplan Prepared by:	Vital Signs, NASA, and Lund University	Workplan Approved by:	Miguel Morales on 5/24/2016
General comments:		CI-GEF Program Manager:	Miguel Morales

SECTION I: Project Results Workplan

PROJECT OBJECTIVE:	To provide guidance, methods and a toolbox for assessing and monitoring status and trends of 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
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COMPONENT 1:	Methods for assessing and monitoring status and trends in land degradation
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EXPECTED OUTCOMES	PROJECT BASELINE	END OF PROJECT TARGET
Outcome 1.1.: Improved understanding of the accuracy, suitability and trade-offs (e.g. resolution, accessibility, repeatability, sustainability/automation, cost, etc.) of different global datasets for estimating status and trends in land degradation	Current methods do not enable estimation of areas of land degradation or drivers	Improved understanding sufficient to identify data sources and methods that enable estimation of areas of land degradation or drivers
Outcome 1.2.: Agreed-upon method(s) for assessing land degradation suitable for identified end-users	Lack of agreement on method(s) for assessing land degradation suitable for end-users	Methods for assessing land degradation have been developed that are suitable for end users and agreed upon among key stakeholders

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS ¹				PROGRESS STATUS JUSTIFICATION
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Output 1.1.1: Comparison of different datasets and methods for land degradation completed <i>Expected completion year: Y1</i>	Activity 1: Gather and process climate data from Vital Signs and other external sources. Responsible party(ies): VS									
	Activity 2: Process and verify 1981-2015 AVHRR 8-km NDVI3g & coincident soil moisture data for Senegal, Uganda, Kenya, and Tanzania. Responsible party(ies): NASA									

¹ **O**= Overdue; **D**= Delayed; **NS**= Not started on schedule; **IS**= Under implementation on schedule; and **CA**= Completed/Achieved

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMELINE			PROGRESS STATUS ¹				PROGRESS STATUS JUSTIFICATION	
	<p>Activity 3: Process and verify 2002-2015 MODIS Aqua & 2000-2015 MODIS 250 Terra NDVI and coincident soil moisture data for Senegal, Uganda, Kenya, and Tanzania. Evaluate the following soil moisture data sets: NASA’s MERRA-2 1981-2016 soil moisture data; the Hadley Center’s HadISDH soil moisture data set; and NOAA’s Climate Prediction Center’s soil moisture data.</p> <p>Evaluate the following NDVI & other vegetation index data sets with the soil moisture data sets: JRC’s 1-km NDVI data set from 1999-2013 derived from SPOT-Vegetation; ESA’s MERRIS 300-m NDVI data from 2002 to 2012; and the MODIS 250-m “enhanced” vegetation index from 2000-2015.</p> <p>Responsible party(ies): NASA</p>									
	<p>Activity 4: Begin and complete NDVI-soil moisture residual trend analyses and error determination by end of third quarter of Year 1 for all NDVI data sets.</p> <p>Responsible party(ies): NASA</p>									
	<p>Activity 5: Process and verify commercial satellite data 50 cm mosaics for Senegal, Uganda, Kenya, and Tanzania.</p> <p>Responsible party(ies): NASA</p>									
	<p>Activity 6: Process and verify Landsat time series (using TM and ETM+ data) for Vital Signs landscapes in Uganda and Tanzania for 2000 through 2015</p> <p>Responsible party(ies): VS</p>									
	<p>Activity 7: Write report for Output 1.1.1 as outlined in paragraph 57 of ProDoc.</p> <p>Responsible party(ies): NASA (lead), VS, Lund</p>									

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS ¹				PROGRESS STATUS JUSTIFICATION
	<p>Activity 8: Complete external technical review of report for Output 1.1.1.</p> <p>Responsible party(ies): VS</p>									
<p>Output 1.1.2: Evaluation of approaches for incorporating higher-resolution data for disaggregation or targeted analysis completed</p> <p><i>Expected completion year: Y2</i></p>	<p>Activity 1: Stratify Senegal into major vegetation types and identify pilot sites for evaluation of land degradation analysis results.</p> <p>Responsible party(ies): Lund (lead), local partners</p>									
	<p>Activity 2: Stratify Tanzania, Uganda, and Kenya into major vegetation types and identify pilot sites for evaluation of land degradation analysis results.</p> <p>Responsible party(ies): CI (lead), local partners</p>									
	<p>Activity 3: Evaluate results of disaggregation of land degradation analyses using high-resolution data (at pilot sites).</p> <p>Responsible party(ies): NASA (lead), VS, Lund</p>									
	<p>Activity 4: Analyze socioeconomic and biophysical data collected by Vital Signs in Kenya, Tanzania, and Uganda to verify and contextualize results of land degradation analyses.</p> <p>Responsible party(ies): VS, local stakeholders</p>									
	<p>Activity 5: Research and development on disentangling the effects of climate and land use on land degradation at the selected localities.</p> <p>Responsible party(ies): Lund</p>									
	<p>Activity 6: Write report for Output 1.1.2 as outlined in paragraph 63 of ProDoc.</p> <p>Responsible party(ies): NASA (lead), VS, Lund</p>									

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS ¹				PROGRESS STATUS JUSTIFICATION
	<p>Activity 7: Complete external technical review of report for Output 1.1.2.</p> <p>Responsible party(ies): VS</p>									
<p>Output 1.2.1: Standard methods, including analytical steps and recommended datasets, agreed and presented to major stakeholders, including countries, GEF, UNCCD and their scientific and technical bodies</p> <p><i>Expected completion year:</i> Y2</p>	<p>Activity 1: Document all land degradation satellite data processing and analyses on an ongoing basis</p> <p>Responsible party(ies): NASA</p>									
	<p>Activity 2: Present approach to GEF and STAP in Washington, D.C.</p> <p>Responsible party(ies): NASA, VS</p>									
	<p>Activity 3: Make web-presentations of approach to UNCCD, UNCCD OFPs, and national counterparts identified in start-up phase</p> <p>Responsible party(ies): NASA, VS, Lund</p>									
	<p>Activity 4: Support the national partners in selecting potential organizations and participants, and specific points of contact, for participation in the training and capacity building</p> <p>Responsible party(ies): Lund</p>									
	<p>Activity 5: Write report for Output 1.2.1 as outlined in paragraph 71 of ProDoc.</p> <p>Responsible party(ies): NASA (lead), VS, Lund</p>									
	<p>Activity 6: Complete external technical review of report for Output 1.2.1.</p> <p>Responsible party(ies): VS</p>									
	<p>Output 1.2.2: Improvement of the GBI algorithm for the Land degradation focal area for GEF-7 based</p>	<p>Activity 1: Research and development on how to improve the GBI algorithm</p> <p>Responsible party(ies): Lund</p>								

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS ¹				PROGRESS STATUS JUSTIFICATION
<p>on better remote sensing/Land Degradation data</p> <p><i>Expected completion year: Y2</i></p>	<p>Activity 2: Benchmark the existing GBI algorithm with improved GBI, and for consistency relative to UNCCD indicators.</p> <p>Responsible party(ies): Lund</p>									
	<p>Activity 3: Document the approaches from raw data, data integration to assess land degradation and GBI indices.</p> <p>Responsible party(ies): Lund</p>									
	<p>Activity 4: Write report for Output 1.2.2 as outlined in paragraph 74 of ProDoc.</p> <p>Responsible party(ies): Lund (lead), VS, NASA</p>									
	<p>Activity 5: Complete external technical review of report for Output 1.2.2.</p> <p>Responsible party(ies): VS</p>									

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

EXPECTED OUTCOMES	PROJECT BASELINE	END OF PROJECT TARGET
<p>Outcome 2.1.: Baseline assessment of land degradation in 4 pilot countries (Kenya, Senegal, Tanzania, Uganda)</p>	Lack of baselines of degradation based on internationally-applicable method(s)	Baselines have been completed for 3 pilot countries and guidance documents have been completed and are available for key stakeholders
<p>Outcome 2.2: Platforms for capacity building and for expanding the use of the data, methods and toolbox to other countries and regions</p>	Lack of platforms to distribute methods and knowledge for estimating degradation	Improved distribution of methods and knowledge through one regional and one global web platform that provide methodological guidance, demonstrations and toolbox.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS ²				PROGRESS STATUS JUSTIFICATION
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Output 2.1.1: Land degradation baseline produced for in-country evaluation for 4 pilot countries <i>Expected completion year:</i> Y2	Activity 1: Interact with major stakeholders in Tanzania, Kenya, and Uganda to gather ancillary datasets (at minimum: climate, topography, elevation, population density, and soils) for land degradation assessment Responsible party(ies): VS									
	Activity 2: Interact with the national partner (CSE) in Senegal to gather ancillary datasets (at minimum: climate, topography, elevation, population density, and soils) for land degradation assessment Responsible party(ies): Lund									
	Activity 3: Develop common metadata standards in with VS and NASA and build database for pilot countries integrating remote sensing data and ancillary data. Responsible party(ies): Lund (lead), NASA, VS									
	Activity 4: Interact with stakeholders to determine most suitable and desirable season for 2015, 2010, 2005, and 2000 Landsat mosaics of each country Responsible party(ies): VS (lead), Lund									
	Activity 5: Produce Landsat mosaics for 2015, 2010, 2005, and 2000 for all four countries. Responsible party(ies): VS									
	Activity 6: Produce land degradation baseline for 1981 for all four countries. Responsible party(ies): NASA (lead), VS, Lund									

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EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS ²				PROGRESS STATUS JUSTIFICATION
	<p>Activity 7: Write report for Output 2.1.1 as outlined in paragraph 93 of ProDoc.</p> <p>Responsible party(ies): NASA (lead), VS, Lund</p>									
	<p>Activity 8: Complete external technical review of report for Output 2.1.1.</p> <p>Responsible party(ies): VS</p>									
<p>Output 2.1.2: Draft guidance documents on methods and toolbox created based on application in four pilot countries (Kenya, Senegal, Tanzania, Uganda)</p> <p><i>Expected completion year:</i> Y2</p>	<p>Activity 1: Develop open-source toolbox for implementing land degradation analyses</p> <p>Responsible party(ies): VS (lead), NASA</p>									
	<p>Activity 2: Develop training material for the effective use of the toolbox.</p> <p>Responsible party(ies): Lund</p>									
	<p>Activity 3: Implement improved GBI calculation in the open-source toolbox GIS toolbox</p> <p>Responsible party(ies): Lund</p>									
	<p>Activity 4: Develop policy relevant guidance on how to apply methods and toolbox in the four countries (report for Output 2.1.2 as outlined in paragraph 98 of ProDoc).</p> <p>Responsible party(ies): Lund (lead), VS, NASA</p>									
<p>Output 2.2.1: Data processing platforms, with data collection protocols, established in regional centers and at global level</p> <p><i>Expected completion year:</i> Y2</p>	<p>Activity 1: Develop website to access all guidance documents and open-source toolbox for applying methods</p> <p>Responsible party(ies): VS</p>									
	<p>Activity 2: Network with organizations with existing platforms in the region to make project outputs accessible from these existing hubs</p> <p>Responsible party(ies): VS, NASA, Lund</p>									
	<p>Activity 3: Develop platform for data dissemination to support download of raw data for use in toolbox</p> <p>Responsible party(ies): VS</p>									

COMPONENT 3:	Gender appropriate capacity development in the application of the toolbox and recommended approaches for estimating status and trends in land degradation using remote sensing
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EXPECTED OUTCOMES	PROJECT BASELINE	END OF PROJECT TARGET
Outcome 3.1.: Strengthened capacity of the 4 pilot countries and regional center in accessing and processing spectral index-related data for estimating status and trends in land degradation	Lack of national capacity to access and process data to estimate degradation	National capacity to access and process data to estimate degradation improved
Outcome 3.2: Enhanced exchange of knowledge among countries and at least one regional center, with equitable participation by women and men, on remote sensing applications for land degradation monitoring	Scarce exchange of knowledge on remote sensing applications for land degradation monitoring	Professional exchanges of key stakeholders from at least four countries completed

EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS ³				PROGRESS STATUS JUSTIFICATION
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Output 3.1.1: Draft gender-sensitive guidance documents and manuals completed, incorporating the GEF, the UNCCD and country feedback, and made available online <i>Expected completion year:</i> Y2	Activity 1: Develop gender appropriate guidance documents and manuals that reflect input and feedback from the GEF, the UNCCD, and the four pilot countries Responsible party(ies): VS (lead), Lund									

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EXPECTED OUTPUTS	PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS ³				PROGRESS STATUS JUSTIFICATION
<p>Output 3.2.1: Training and capacity building of 4 national and at least one regional center in Africa, with equitable participation by women and men, on remote sensing methods and manuals developed in the previous stages for land degradation monitoring</p> <p><i>Expected completion year:</i> Y2</p>	<p>Activity 1: Carry out training on how to apply the toolbox to real LD assessments in the four countries</p> <p>Responsible party(ies): Lund (lead), VS, NASA</p>									

Section II: Project Environmental & Social Safeguards Compliance Workplan

Stakeholder Engagement Plan (SEP)										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<p>Activity 1: Engage UNCCD national focal points from Kenya, Senegal, Tanzania and Uganda, as well as STAP and ESA representatives in the project inception workshop and agree on best methods for future consultation</p> <p>Responsible party(ies): VS</p>										
<p>Activity 2: Engage national UNCCD focal points, and national technical experts from the four pilot countries in capacity building workshops, using participatory methods, and solicit input from them in advance and following the workshops through surveys and interviews</p> <p>Responsible party(ies): Lund, VS</p>										
<p>Activity 3: Disseminate all project data, the toolbox and capacity building materials, and project reports through the project website and through the WOCAT portal</p> <p>Responsible party(ies): VS</p>										
<p>Activity 4: Engage the international scientific community through participation and presentations at scientific conferences and we will engage them in formal peer review of the toolbox and reports</p> <p>Responsible party(ies): VS, NASA, Lund</p>										

Gender Mainstreaming Plan (GMP)										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<p>Activity 1: Prepare and submit for approval, along with the Year 2 Workplan, a document detailing: (1) how gender issues will be effectively incorporated into capacity building guidelines and manuals (Outputs 3.1.1.); and (2) The measures that will be put in place to ensure the equitable participation of women and men in national and regional training workshops (Output 3.1.2.).</p> <p>Responsible party(ies): VS</p>										

<p>Activity 2: Using Vital Signs socioeconomic data in Kenya, Tanzania and Uganda, conduct analyses at sub-national scales, to evaluate the extent to which women are impacted by land degradation and to provide insights that will help enable countries to target land improvement activities that will benefit women.</p> <p>Responsible party(ies): VS</p>									
<p>Activity 3: Develop gender appropriate training materials (Output 3.1.1), and ensure that at least 40% of the people trained are women</p> <p>Responsible party(ies): VS</p>									
<p>Activity 4: Monitor gender disaggregated indicators of workshop participants and individuals trained.</p> <p>Responsible party(ies): VS, Lund</p>									

Accountability and Grievance Mechanisms										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<p>Activity 1: Set up process for monitoring, addressing and resolving any and all grievances and assign a primary point of contact</p> <p>Responsible party(ies): PSC</p>										
<p>Activity 2: Post instructions on the project web site with the contact information and information regarding the grievance mechanism, including contact information for the PSC members and CI-GEF Project Agency staff</p> <p>Responsible party(ies): VS</p>										
<p>Activity 3: Primary point of contact will respond to grievances in writing within 15 calendar days of receipt, and will file claims and include in project monitoring and reporting</p> <p>Responsible party(ies): Designated point of contact from activity 1</p>										

Section III: Project Risks Management Workplan

No high or medium risks were identified in the Project Document.

Section IV: Project M&E Workplan

a. Project Inception Workshop										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Activity 1: Hold inception workshop within the first three months of project start including the project stakeholders Responsible party(ies): VS, NASA, Lund										
Activity 2: Detail the roles, support services and complementary responsibilities of the CI-GEF Project Agency and the Executing Agency at the inception workshop Responsible party(ies): CI-GEF PROJECT AGENCY, VS										

b. Project Inception Workshop Report										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Activity 1: Produce an inception report documenting all changes and decisions made during the inception workshop to the project planned activities, budget, results framework, and any other key aspects of the project within one month of the inception workshop Responsible party(ies): VS										

c. Project Results Monitoring Plan (Objective, Outcomes and Outputs)										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Activity 1: Monitor all indicators identified in the Project Results Monitoring Plan Responsible party(ies): VS										
Activity 2: Monitor all indicators identified in the Safeguard Plan throughout the life of the project to assess whether the project has successfully achieved its expected results Responsible party(ies): VS										

d. Focal Area Tracking Tool										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Activity 1: Complete GEF Focal Area Tracking Tools prior to project start-up Responsible party(ies): VS										
Activity 2: Complete GEF Focal Area Tracking Tools at the time of the terminal evaluation Responsible party(ies): VS										

e. Project Steering Committee Meetings										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Activity 1: Hold PSC (Project Steering Committee) meetings quarterly via conference call Responsible party(ies): PSC, VS										
Activity 2: Monitor PSC meetings and report results quarterly Responsible party(ies): VS										

f. CI-GEF Project Agency Field Supervision Missions										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Activity 1: Conduct annual visits to the project and potentially to project field sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress Responsible party(ies): CI-GEF										
Activity 2: Prepare Field Visit Report and circulate to the project team and PSC members within one month of the visit. Responsible party(ies): CI-GEF										

g. Quarterly Progress Reporting										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Activity 1: Submit quarterly progress reports to the CI-GEF Project Agency, including a budget follow-up and requests for disbursement to cover expected quarterly expenditures Responsible party(ies): VS										

h. Annual Project Implementation Report (PIR)										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Activity 1: Prepare an annual PIR to monitor progress made since project start and in particular for the reporting period (July 1st to June 30th) Responsible party(ies): VS										
Activity 2: Share summary of the report with the Project Steering Committee Responsible party(ies): VS										

i. Project Completion Report										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Activity 1: Draft a final report at the end of the project Responsible party(ies): VS										

j. Independent Terminal Evaluation										
PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Activity 1: Conduct an independent Terminal Evaluation within six months after project completion and in accordance with CI-GEF Project Agency and GEF guidance. The terminal evaluation will focus on the delivery of the project's results as initially planned (and as corrected, if any such correction took place). Responsible party(ies): CI-GEF										

<p>Activity 2: Provide a formal management answer to the findings and recommendations of the terminal evaluation</p> <p>Responsible party(ies): VS</p>									
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k. Lessons Learned & Knowledge Generation

PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<p>Activity 1: Disseminate results within and beyond the four pilot countries through existing information sharing networks and fora. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation through lessons learned.</p> <p>Responsible party(ies): VS, Lund, NASA</p>									
<p>Activity 2: Identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. There will be a two-way flow of information between this project and other projects of a similar focus.</p> <p>Responsible party(ies): VS</p>									

l. Financial Statement Audit

PLANNED ACTIVITIES	TIMELINE				PROGRESS STATUS				PROGRESS STATUS JUSTIFICATION
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<p>Activity 1: Annual Financial reports submitted by the executing Agency will be audited annually by external auditors appointed by the Executing Agency.</p> <p>Responsible party(ies): VS, CI-GEF, External Auditors</p>									