REQUEST FOR CEO APPROVAL

PROJECT TYPE: Medium-sized Project
TYPE OF TRUST FUND:GEF Trust Fund

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title: Spatial Planning for Protected Areas in Response to Climate Change (SPARC)			
Country(ies):	83 tropical countries in the 3 target regions (Neotropical, Afro-tropical and Indo-Malayan biogeographic realms)	GEF Project ID:[1]	5810
GEF Agency(ies):	Conservation International	GEF Agency Project ID:	
Other Executing Partner(s):	The Moore Center for Science and Oceans at Conservation International (MCSO); University of Leeds; University of Stellenbosch; Catholic University of Chile; Xishuangbanna Tropical Botanical Gardens	Submission Date:	2015-10-01
GEF Focal Area (s):	Biodiversity	Project Duration(Months)	36
Name of Parent Program (if applicable): ➢ For SFM/REDD+ ☐ ➢ For SGP ☐ ➢ For PPP ☐		Project Agency Fee ($):	162,438

A. FOCAL AREA STRATEGY FRAMEWORK[2]

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount ($)	Cofinancing ($)
(select) BD-1	Outcome 1.1: Improved management effectiveness of existing and new protected areas.	Output 1.1 New protected areas (number) and coverage (hectares) of unprotected ecosystems. Output 1.2 New protected areas (number) and coverage (hectares) of unprotected threatened species (number).	GEF TF	1,804,862	3,655,992
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
		Total project costs		1,804,862	3,655,992

[1] Project ID number will be assigned by GEFSEC.
[2] Refer to the Focal Area Results Framework and LDCF/SCCF Framework when completing Table A.

B. PROJECT FRAMEWORK

Project Objective: Provide countries in the Neotropical, Afrotropical and Indo-Malayan biogeographic realms with the assessments and data needed to improve planning, design and management of terrestrial protected areas for climate change resilience.						
Project Component	**Grant Type**	**Expected Outcomes**	**Expected Outputs**	**Trust Fund**	**Grant Amount ($)**	**Confirmed Cofinancing ($)**
Component 1: Global data compilation and analysis of protected area vulnerability to climate change	TA	Outcome 1.1: Information on species range shifts and ecosystem change made available for regional assessments.	Output 1.1.1: Species range shifts due to climate change simulated at coarse scale and information on vulnerability compiled. Output 1.1.2: Global models of ecosystem change compiled and formatted.	GEF TF	403,424	966,969
		Outcome 1.2: Conservation planning methods allowing regional assessment of representation losses resulting from species range shifts and ecosystem changes developed and readily available.	Output 1.2.1: Methodology for assessment of representation losses in terrestrial protected areas developed and peer-reviewed Output 1.2.2: Methodology for protected areas system planning to compensate for representation losses developed and peer-reviewed.			
		Outcome 1.3: Regional assessment teams have coarse scale information needed to understand priority areas for protected areas system planning to counteract loss of representation due to climate change.	Output 1.3.1: Coarse scale conservation planning conducted for the three regions.			
Component 2: Regional fine scale assessment and research-to-policy briefs	TA	Outcome 2.1: Regional assessments produced by teams of leading scientists from each of the	Output 2.1.1: Regional analyses using multiple lines of evidence available and published.	GEF TF	1,057,567	2,632,962

		three regions	Output 2.1.2: Potential for protected areas expansion to offset loss of representation identified.			
		Outcome 2.2: Research-to-policy briefs prepared and presented to government protected areas agencies.	Output 2.2.1: Research-to-policy briefs delineating multi-country technical issues and multi-national collaborative response opportunities associated with species and ecosystem changes produced and presented. Output 2.2.2: Research-to-policy briefs on country technical issues and opportunities for protected areas adaptation presented to government protected areas management agencies.			
		Outcome 2.3: Decision support tools for visualization and interactive use of research results produced.	Output 2.3.1: Option-exploration decision support tool developed and protected areas policymakers and planners trained in its use.			
Component 3: Monitoring and Evaluation	TA	Outcome 3.1: Participatory M&E framework and an informative and proactive feedback mechanism integrated at all levels of project management. Outcome 3.2: Adaptive implementation of regional assessments.	Output 3.1.1: Project monitoring system operating and systematically providing information on progress in meeting project output and outcome targets. Output 3.2.1: Multiple knowledge-mapping products defining portable knowledge gained from each regional assessment, and mapping knowledge flow and	GEF TF	194,846	0

			information products for each regional assessment.			
Subtotal					1,655,837	3,599,930
Project management Cost (PMC)[3]				GEF TF	149,025	56,062
Total project costs					1,804,862	3,655,992

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME ($)

Please include letters confirming cofinancing for the projeSct with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount ($)
GEF Agency	Conservation International	Cash	189,188
GEF Agency	Conservation International	In-kind	449,504
Others	Stellenbosch University (South Africa)	In-kind	420,000
Others	Stellenbosch University (South Africa)	Cash	365,000
Others	University of Leeds (UK)	Cash	98,000
Others	University of Leeds (UK)	In-kind	500,000
Others	CSIRO (Australia)	In-kind	184,584
Others	University of Arizona (US)	Cash	649,716
Others	IUCN	In-kind	350,000
Others	Catholic University of Chile (Santiago)	Cash	450,000
Total Co-financing			3,655,992

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in $)		
				Grant Amount (a)	Agency Fee (b)[2]	Total c=a+b
Conservation International	GEF TF	Biodiversity	Global	1,804,862	162,438	1,967,300
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources				1,804,862	162,438	1,967,300

[1] In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

[2] Indicate fees related to this project.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

[3] PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

Component	Grant Amount ($)	Cofinancing ($)	Project Total ($)
International Consultants	217,219	0	217,219
National/Local Consultants	0	0	0

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF[4]

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

A.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

A.3 The GEF Agency's comparative advantage: For more than 25 years, Conservation International has been protecting nature for the benefit of everyone on Earth. CI's work focuses on science, policy, and partnership with businesses and communities. The organization employs more than 1,000 people and works with 2,000+ partners in more than 30 countries. Through its work in biodiversity conservation and climate change, CI has helped establish 1,200 protected areas across 78 countries and protected more than 730 million hectares of land, marine and coastal areas.

With Science at the core of its mission, CI houses over 150 scientists and lead experts in a variety of fields at the CI headquarters. The CI-GEF Project Agency has direct access to this pool of technical experts that can help guide and design the best projects, monitor the results, and propose adjustments if needed.

A.4. The baseline project and the problem that it seeks to address: Most tropical protected areas management agencies are currently planning without comprehensive information about climate change impacts. While at least 74 global and regional studies of climate change impacts on species and ecosystems have been published, none have been used to systematically plan protected areas networks. Most of these studies are at coarse scale or for small numbers of species (<500) and were conducted using dated global climate models (72/74). This means that these studies cannot form the basis for comprehensive (vertebrates and plants), state-of-the-science (latest climate model) multi-species (>1000) protected areas planning efforts, even at national scales, and are completely inadequate for multi-country or regional protected areas planning. Nonetheless, some efforts are extending these impact analyses into effective climate change planning for protected areas. Mexico[5] is one of the few countries mounting a systematic effort to address climate change impacts in its protected areas system. Regional efforts in West Africa[6] and the Amazon are showing the value of multi-country planning. But most countries fall outside the scope of these exercises.

This leaves national protected areas planners and individual protected areas managers with a long-range, complex problem for which they have few analytical tools or capacity to address. For example, in South Africa, the number of Protea species found in protected areas may fall by 8-15% due to climate change by 2050, and by 25-38% if viable populations are to be represented (Hannah et al 2007). This is because these rare plants will be migrating

[4] For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question.

[5] Strengthening Management Effectiveness and Resilience of Protected Areas to Safeguard Biodiversity Threatened by Climate Change, Mexico (GEF)

[6] Protected Areas Resilient to Climate Change (PARCC West Africa GEF Project)

upslope and poleward into unprotected montane habitats to track suitable climatic conditions as the region warms. As a result, the number of threatened Protea species is expected to double in some areas of South Africa due to climate change and land use combined (Figure 1). Adding protected areas in the habitats that are accumulating species threatened by climate change can remove land use as a threat and help ensure the conservation of these species.

The majority of tropical countries will pursue climate change planning with partial information from existing studies on individual taxa (e.g., Proteas, birds) or areas, or with no information at all. Improving protected areas response to climate change in these countries will depend on climate change research that happens to be initiated within their system or region. The timeline for availability of research results is highly uncertain and the relevance of research to protected areas planning is happenstance.

In this scenario, habitat destruction continues to narrow the scope for protected area establishment, and may result in no scope for placing protected areas in the right places to compensate for range shifts due to climate change. Research may never address the species and ecosystems most at risk, or examine changes in ways that are useful for constructed spatial plans for protected areas systems.

Opportunities to place protected areas in locations that help respond to climate change will be missed. Some new protected areas may be placed in locations that help respond to climate change by sheer good luck, or because fragmentary research results suggest important sites. But many other possible locations will go unrecognized due to lack of information on range shifts or due to lack of systematic planning to compensate for range and ecosystem shifts.

As climate change continues tropical protected areas systems not designed for climate change will lose species and have representation of key ecosystems reduced. Species will be moving in response to climate change, and without identification of the sites that can capture both present and future ranges, species will move out of protected areas. Ecosystems will move out of protected areas as well. Other species and ecosystems may increase inside protected areas, but the net effect will be loss of representation due to sub-optimal siting of protection.

In countries that have received GEF support to improve representation of priority species and ecosystems, those gains will be eroded. Additional support will be unlikely to redress the problem, since ongoing habitat loss will have eliminated needed habitats by the time the problem is detected. Proactive research and advance planning will be absent and the resulting reactive strategy for dealing with climate change erosion of representation will be expensive and ineffective.

A. 5. Incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

This project will generate information not affordable to individual countries under the baseline scenario, enabling activities that would not be undertaken under that scenario. Under the GEF Alternative, countries will have access to regional climate change information and information about climate responses of species and ecosystems that would only be partly available in a series of country-by-country or protected area-by-protected area assessments. This greater regional context will enable cooperative actions with other countries not possible in the baseline. It will allow country-level decisions to be made in regional context not possible for the number of species or number of ecosystems afforded by the GEF Alternative. Additional actions will be possible in within country protected area planning and in cross-border collaboration that would be impossible without the extended depth and geographic and taxonomic breadth of information provided by the GEF Alternative.

Global scenarios provide information on global trends in climate change and other threats in a format readily accessible to protected areas agencies. Most protected areas agencies have neither the personnel nor skill sets to assemble global climate, biodiversity and threats datasets. Making such datasets available for national planning exercises would normally be handled through external consultancies. The cumulative cost of external consultancies, gathering global data for application in similar national planning exercises is prohibitive. Most national protected areas agencies would therefore simply forego information available in global scenarios. The GEF Alternative provides this global scenario information in an accessible and cost-effective format, leveraging national planning funds and making national-level planning efforts more effective and sustainable in the face of climate change.

Regional assessments make regional climate and biodiversity models available to countries using state-of-the-art methods. Without this support, most countries would use more simplistic and less complete information about climate change effects on species and ecosystems. In particular, comparable regional simulations of species and ecosystem movements to track suitable climate would be limited or unavailable. Countries would use published information from the scientific literature, which would be dated, would not be comparable between taxa or geographies and would be limited in geographic scope. Provision of regional models covering all of a biogeographic realm allows countries to plan using seamless data with no jumps along study boundaries and no gaps. This greatly improves the likelihood of maintaining species and ecosystem representation due to national planning efforts that are sound in the face of climate change. It allows national investments in protected areas planning to benefit from levels of climate change information and regional context not commonly available to national efforts.

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

The three main risks faced by the project are climate projection uncertainty, lack of stakeholder uptake and insufficient natural habitat. These risks are well recognized by the project and the project uses specific tools to overcome these risks. In addition to the risks associated with project assumptions, there is one risk associated with project management, which is the willingness of scientists to participate in the regional assessments.

Climate projection uncertainty is inherent in all climate change assessment and planning. Ensemble forecasts are the leading recognized tool for dealing with uncertainty. The project will use ensemble forecasts in the manner recommended by the IPCC. Scenario planning is another major tool for dealing with uncertainty. The project will incorporate scenario planning in both the global and regional phases of the analysis.

Stakeholder uptake is essential to project success. The project is designed to present results to stakeholders in two formats to improve likelihood of uptake. The first product is written, and is accessible even to policymakers with no technical background. The second product is decision support tools, which is accessible to agency technical staff, and to non-specialist policymakers working with agency technical staff. Person-to-person interactions and training with protected agency staff will be used to improve understanding of project outputs and decision support tools. The need for systematic planning is addressed by integrating systematic planning tools directly into the decision support tool package.

Lack of sufficient natural habitat to add new or extend protected areas constrains the ability to add protection to rebuild representation of species and ecosystems lost due to climate change. This is a risk in areas of high habitat loss. Where habitat loss is so severe that there is no scope for possible new or extended protected areas, species movements have to be accommodated within existing protected areas. This can be done by enhancing habitats within protected areas to maintain moving populations (and avoid local extinctions), by habitat management to maintain existing populations in their existing locations (e.g., managing fire to prevent ecosystem change) or by artificially translocating species between protected areas where natural range movements are blocked by large areas of no natural habitat.

The risk associated with scientist willingness to participate in regional assessments arises because scientists are not directly contracted to perform this work. The project addresses this risk by making participation in the regional assessments professionally attractive, and through small grants. The regional assessments will result in high-profile publications, which will attract participation from top regional scientists. Small grants will be used to facilitate student and postdoc work on the project, further facilitating regional scientist participation.

A.7. Coordination with other relevant GEF financed initiatives Other initiatives in addition to those described at the PIF stage:

The Amazon Biome project of WWF is not GEF funded, but has strong complementarity to the present project. Amazon Biome is funded by the German Climate Initiative (IKI) and seeks to integrate climate change into decision-making about Amazonian conservation. The project will maintain close communication with Amazon Biome and share modeling results with the Amazon Biome stakeholder's network.

ScenNet is an initiative of IPBES that seeks to create scenarios of biodiversity and ecosystems to inform conservation and IPBES reports. ScenNet is a multi-country effort and will be working on climate change scenarios as well as other scenarios of biodiversity change. The project will integrate scenario development where possible and interface with ScenNet for stakeholder engagement where project and ScenNet audiences coincide.

Transfer of GEF Project Agency and Changes made to the Results Framework

This project was approved at the PIF stage with WWF as the GEF Project Agency and CI as an executing partner. During the project preparation phase, consultations with key stakeholders revealed that there are already many modeling efforts underway at national and ecoregion scales but no continental pan-tropical species-focused modeling. Moreover, there were concerns from national level decision-makers and partners about the project's results duplicating modeling efforts combined with little national-level buy-in of global modeling. As a result, the consultations found that perceptions of national-level needs for decision-making are quite different what this project was initially designed to address. Redesigning the project to prioritize continental-scale modeling will no longer have an emphasis on the national-level component, which was WWF's comparative advantage for implementing this project. Since continental-scale modeling was the baseline and comparative advantage for CI's involvement in the project, the project was transferred to the CI GEF Project Agency.

Below are the changes to the Results Framework as a result of redesigning the project:

Change to Project Objective

Addition of ecoregions to focus on most affected biological units and multi-country nature of change.

Changes to Project Components

Component 1:

PIF Component 1 has been split into two parts to more closely correspond to the work flow. This first component uses global datasets and models to define data gaps and areas of high vulnerability within each region (Afrotropics, Neotropics, Indo-Malayan). The second component uses science teams from each region to help fill the data gaps and analyze the high vulnerability areas in more detail. New Component 1 is therefore renamed and addresses only the global part of PIF Component 1.

Component 2:

This is a new Component (second part of PIF component 1).

Component 3:

Replaces PIF Component 2 and is now Component 3.
PIF Component 3 (M&E) was eliminated and activities folded into each of the three new components.

Changes to Expected Outcomes

Component 1:

PIF Outcome 1.1 is now Outcome 2.1, consistent with the split of PIF Component 1 into two parts. PIF Outcome 1.2 is the first Outcome of the new component 1. The other Outcomes of new Component 1 describe the intermediate outcomes achieved in the global model compilation.

Global models include global climate models, models of vegetation run at global domains as part of GCMs or Earth System Models, Global Dissimilarity Modeling of CSIRO, global velocity of climate change models and others.

Component 2:
These outcomes describe work formerly included in PIF Component 1 that will be conducted by the regional science teams. This work builds on the assessment of global data sets, but is more specific and targeted, filling data gaps in each region, focusing on highly vulnerable areas and responding to local/regional protected areas context. These outcomes also include preparation of research-to-policy briefs to be presented to government protected areas agencies and the production of decision support tools for visualization and interactive use of results generated.

Component 3:
Based on learning during ProDoc development, the ambitions of this component have been greatly reduced. In-depth analysis of climate change decisions for focal countries or groups of countries will not be attempted, as this was found to be not feasible within the resources available to the project. Instead, low-cost, broad-reach techniques will be used including web portals, trainings and online training materials.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1 Describe how the stakeholders will be engaged in project implementation.

A Stakeholder Engagement Plan (refer to Appendix VI of the ProDoc) was prepared during the project preparation phase. This plan is intended to fulfill the CI-GEF agency policies on the processes of informing and engaging the partners and stakeholders in the project. The CI-GEF Project Agency oversees the Executing Entity involving all stakeholders as early as possible in the preparation process and makes sure that their views and concerns are taken into account. The CI-GEF Project Agency team will further ensure that the Executing Entity will continue to hold consultations throughout the project as described in this plan. To address this requirement and respond to the design of the project, the stakeholder engagement plan is organized to address each of the three components of the project – global data compilation; regional assessments; and monitoring and evaluation.

Engagement and consultation with CBD focal points, NGOs and development agencies will be built into the regional assessment methods at the project inception meeting. Representatives of STAP will be engaged through the Science Advisory Panel of the project. International NGOs will be engaged through the executing agency and through the project's international advisors.

National protected areas agency staff will be engaged in development of response strategies, decision-support tools and conservation planning software package trainings. Input will be sought from them during regional assessment planning and in design of responses to impacts identified in the regional assessments.

The international scientific community will be engaged through participation and presentations at scientific conferences. The regional scientific communities will be engaged through appropriate journals and participation in regional science meetings and organizations.

The Stakeholder Engagement Plan will be implemented in conjunction with the Gender Mainstreaming Strategy and Action Plan thus ensuring that gender equity is maintained throughout project interactions with stakeholders.

B.2 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

Project outputs that support adaptive reserve design and predict changes in ecosystem resources under future climate scenarios have direct relevance for developing sustainable societies and safeguarding human well-being. This is particularly relevant in the tropics where the majority of the world's biodiversity persists adjacent to developing economies, urbanization and industries.

Women are important decision makers in many rural settings in the tropics that have significant natural habitats and therefore influence and are influenced by mid-long term strategies for the conservation of nature. As potential beneficiaries of the improved resilience that a robust network of protected areas can afford, recognition of the role of women in decision-making in land use planning can help avoid negative consequences that result from poorly planned or unplanned development. Protected areas planning is an opportunity to create a framework which includes sound gender participation. The project will identify settings in which women are likely to be key stakeholders and decision makers and identify CSOs that may be successful vehicles for inclusive gender participation. Identifying these situations and CSOs to national protected areas planning agencies will help foster participation of women in land use planning in general and protected areas planning and planning for climate change in particular. Many effective, gender-inclusive land use planning efforts begin at local or regional scales. The project will identify these efforts and bring them to the attention of national agencies where possible, further enhancing opportunities for participation in land use planning for women.

Working to conserve ecological function through changes to reserve design improves the likelihood that authorities and communities can adapt to and reduce disruptions to local and national economies. Hence the implications of changes in critical ecosystem services generated by and linked to those managed areas are better understood (e.g. food security, water management, carbon sequestration, traditional spiritual values etc.). Notwithstanding the final use of project information by management authorities, the project group and collaborators at national levels will work to ensure that knowledge generated is widely distributed in a gender appropriate and accessible format (see communications section).

Project results will also help inform managers and policy makers when addressing what climate shifts mean to local communities and indigenous peoples given their traditional dependencies upon natural ecosystem goods and services. This has potential to help identify susceptible communities and hence through planning and capacity building, avoid or moderate adverse impacts upon local societies (e.g. adapting access rights, understanding effects upon gender roles, improving the resilience of economies to climate effects etc.). Sustainable alternatives to traditional resources and preparation for lifestyles in response to predicted shifts in natural resources will help buffer local economies and bolster the resilience of local societies when dealing first hand with climate change effects.

Local communities participating in ecotourism associated with protected areas will benefit from better conservation of the biodiversity assets that tourism relies upon. Planning of tourism for changing species composition will enable greater sustainability in local tourism industries. Local communities may also benefit from better understanding of plant functional changes that may affect ecosystem services such as water provision and pollination, in addition to the biodiversity benefits to tourism.

The global biodiversity benefits of this project are linked to local socio-economic benefits through sound planning processes for climate change. The project cannot provide sound planning processes, but it can ensure that sound information about climate change is available as early as possible. This is a necessary condition for sound planning for climate change. Planning will optimize community and global benefits if it is done in anticipation of climate change impacts and using long-term planning horizons, rather than in short term crisis-response once climate change impacts are already evident. By providing critical information before climate change impacts are fully felt, the project helps maximize that chance for positive planning outcomes that realize benefits at all levels, and for both biodiversity and for local human welfare.

B.3. Explain how cost-effectiveness is reflected in the project design:

Alternatives to the Business-as-Usual (BAU) scenario include 1) individual protected area assessment, 2) country-level assessment, and 3) comprehensive regional assessment.

The most cost-effective alternative to the BAU scenario is the comprehensive regional assessment. This multi-country, pan-tropical approach achieves efficiencies of scale over both protected area and country assessment approaches. Most species have ranges that span more than one country and most ecosystems (in the sense of GEF protected areas targets) cross national borders. It is therefore more effective to conduct a single comprehensive assessment than it is to conduct multiple overlapping assessments.

Country assessment requires assembling regional climate models that include the country and species and ecosystem data for the entire ranges of all species in the country and all ecosystems in the country. This includes large areas outside of the country because climate models must be run over domains larger than the area of interest and because many species found in an individual country will be found in many other countries as well. Climate models are then used to project impacts on species ranges, followed by conservation planning to site new protection to compensate for the effects of climate change on species ranges and ecosystems. Conservation planning again must span multiple countries, to capture the entire ranges of the species addressed in the plan. This is because the survival of the species will depend on multiple populations, so avoiding stochastic extinction requires representation of the species in multiple protected areas. Ensuring that this requirement is met in both the species' present *and* future ranges requires planning across the species entire range. For instance, a conservation plan for *Aloe dichotoma* in Southern Africa would include protection of populations in both Namibia and South Africa (Foden 2008). As climate changes and the species range shifts south to track suitable conditions, more protection is needed in South Africa to maintain the same number of protected populations.

Country level assessment is inherently inefficient, because it requires repeating many steps in the analysis. Regional climate models must be run or downscaled multiple times for each country or at least for multiple regions, species data must be assembled from regional and international sources for each assessment, and conservation planning must be run for each assessment. Each of these steps requires largely overlapping data collection or analysis. A more efficient approach generates the regional climate and biodiversity analyses once, then adapts and applies them to individual country contexts.

Protected area level assessment is inefficient for the same reasons that country assessment is inefficient, with the inefficiencies multiplied across the number of protected areas in each country. These detailed local assessments have advantages in reflecting local realities, but waste resources replicating climate and biological analyses that are more efficiently carried out at a regional scale.

The inefficiencies of country and protected areas assessment alternatives translate directly into cost-effectiveness disadvantage. Each assessment step requires specialist scientists and computer time that cost money. Regional assessments pay for these steps once, across an entire area bounded by oceans. Country and protected area assessment alternatives would pay for these steps multiple times, across overlapping domains within the continent. Paying for these duplicative assessment steps results in serious cost inefficiencies. For example, developing and running a Regional Climate Model can cost hundreds of thousands or millions of dollars.

The cost-effectiveness advantage of the comprehensive regional alternative scales with the degree of duplication of country or protected areas alternatives. The protected areas alternative would involve hundreds of duplicated steps and would result in millions of dollars in inefficient expenditure. The country assessment alternative would be more cost-effective than the protected areas alternative, but still much less cost effective than the country approach. In fact, it is difficult to imagine duplicative country approaches unfolding across a continent such as Africa. Nations or donors would recognize the inefficiency and collaborate at least across regions (see the Protected Areas Resilient to Climate Change, PARCC West Africa project) to realize economies of scale.

No pan-tropical comprehensive regional assessment approach has evolved to take advantage of this high cost-effectiveness because it would require collaboration among dozens of national level agencies. Such collaboration carries high transaction costs (travel, organizational meetings) that agencies do not have the budget to overcome. An alternative is to plan a pan-tropical comprehensive regional assessment approach and make the results available to country-level decision-makers. This is the most cost-effective approach and is the alternative chosen for this proposal.

C. DESCRIBE THE BUDGETED M &E PLAN:

The Project M&E Plan includes the following components (see Section 7 of the ProDoc for details):

Inception workshop

Project inception workshop will be held within the first three months of project start with the main project stakeholders. An overarching objective of the inception workshop is to assist the project team in understanding and taking ownership of the project's objectives and outcomes. The inception workshop will be used to detail the roles, support services and complementary responsibilities of the CI-GEF Project Agency and the Executing Agency.

The project's M&E plan will be presented and finalized at the project inception workshop, including a review of indicators, means of verification, and the full definition of project staff M&E responsibilities.

Inception workshop Report

The Executing Agency will 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. The inception report will be produced within one month of the inception workshop, as it will serve as a key input to the timely planning and execution of project start-up and activities.

Project Results Monitoring Plan (Objective, Outcomes, and Outputs)

A Project Results Monitoring Plan was developed by the Project Agency (see Appendix IV-a for details), which includes objective, outcome and output indicators, metrics to be collected for each indicator, methodology for data collection and analysis, baseline information, location of data gathering, frequency of data collection, responsible parties, and indicative resources needed to complete the plan.

In addition to the objective, outcome, and output indicators, the Project Results Monitoring Plan table also includes all indicators identified in the Stakeholders' Engagement Plan (SEP) prepared for the project, thus they will be consistently and timely monitored.

The monitoring of these indicators throughout the life of the project will be necessary to assess if the project has successfully achieved its expected results.

Baseline Establishment: in the case that all necessary baseline data has not been collected during the PPG phase, it will be collected and documented by the relevant project partners ***within the first year*** of project implementation.

GEF Focal Area Tracking Tools

The relevant GEF Focal Area Tracking Tools was completed i) prior to project start-up, and will be updated ii) prior to mid-term review, and iii) at the time of the terminal evaluation.

Project Steering Committee Meetings

Project Steering Committee (PSC) meetings will be held annually, semi-annually, or quarterly, as appropriate. Meetings shall be held to review and approve project annual budget and work plans, discuss implementation issues and identify solutions, and to increase coordination and communication between key project partners. The meetings held by the PSC will be monitored and results adequately reported.

CI-GEF Project Agency Field Supervision Missions

The CI-GEF PA will conduct annual visits to the project country 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. Oversight visits will most likely be conducted to coincide with the timing of PSC meetings. Other members of the PSC may also join field visits. A Field Visit Report will be prepared by the CI-GEF PA staff participating in the oversight mission, and will be circulated to the project team and PSC members within one month of the visit.

Quarterly Progress Reporting

The Executing Agency will submit quarterly progress reports to the CI-GEF Project Agency, including a budget follow-up and requests for disbursement to cover expected quarterly expenditures.

Annual Project Implementation Report (PIR)

The Executing Agency will prepare an annual PIR to monitor progress made since project start and in particular for the reporting period (July 1st to June 30th). The PIR will summarize the annual project result and progress. A summary of the report will be shared with the Project Steering Committee.

Final Project Report

The Executing Agency will draft a final report at the end of the project.

Independent External Mid-term Review

The project will undergo an independent Mid-term Review within 30 days of the mid-point of the grant term. The Mid-term Review will determine progress being made toward the achievement of outcomes and will identify course correction if needed. The Mid-term Review will highlight issues requiring decisions and actions, and will present initial lessons learned about project design, implementation and management. Findings and recommendations of the Mid-term Review will be incorporated to secure maximum project results and sustainability during the second half of project implementation.

Independent Terminal Evaluation

An independent Terminal Evaluation will take place within six months after project completion and will be undertaken in accordance with CI and GEF guidance. The terminal evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The Executing Agency in collaboration with the PSC will provide a formal management answer to the findings and recommendations of the terminal evaluation.

Lessons Learned and Knowledge Generation

Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. 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 though lessons learned. The project will 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.

Financial Statements Audit

Annual Financial reports submitted by the executing Agency will be audited annually by external auditors appointed by the Executing Agency.

The Terms of References for the evaluations will be drafted by the CI-GEF PA in accordance with GEF requirements. The procurement and contracting for the independent evaluations will handled by CI's General

Counsel's Office. The funding for the evaluations will come from the project budget, as indicated at project approval.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):): (Please attach the Operational Focal Point endorsement letter(s) with this form. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Not Applicable (Global project)			

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date *(Month, day, year)*	Project Contact Person	Telephone	Email Address
Lilian Spijkerman, Conservation International		10/01/2015	Miguel Morales	7033412550	mamorales@conservation.org

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Objective:	Provide countries in the Neotropical, Afrotropical and Indo-Malayan biogeographic realms with the assessments and data needed to improve planning, design and management of terrestrial protected areas for climate change resilience.
Indicator(s):	a. Number of plans governing national protected areas systems integrating the effects of climate change on species and ecosystem targets b. Number of policies or regulations integrating research-to-policy brief recommendations c. Number of opportunities identified to reduce loss of species or ecosystem representation in protected areas due to climate change d. Number of protected areas agency staff trained in and implementing climate change decision support tools

Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
Component 1: Global data compilation and analysis of protected area vulnerability to climate change			
Outcome 1.1.: Information on species range shifts and ecosystem change made available for regional assessments. **Indicator 1.1.:** Species and ecosystem change databases and geospatial data available to regional assessment teams.	Methods for assessing species and ecosystem change in response to climate exist, but data is scattered in global or sub-continental studies not readily available for regional analyses. Many lines of evidence remain unavailable to country level assessments as they are too expensive or too difficult to extract from massive global datasets.	Data on species and ecosystem change is available for regional analysis from a spectrum of methods; including species distribution models, climate vulnerable traits assessment, novel and disappearing climates, velocity of climate change, Dynamic Global Vegetation Models and Generalized Dissimilarity Modeling (GDM). Data are comparable across regions. Data from large global datasets are extracted and made available for regional assessment. Methods for interpreting surrogates such as GDM and velocity of climate change are available and ready for application in conservation planning software.	**Output 1.1.1.:** Species range shifts due to climate change simulated at coarse scale and information on vulnerability compiled. **Indicator 1.1.1.:** Number of species change models created or converted into formats readily accessible for regional assessment. **Output 1.1.2.:** Global models of ecosystem change compiled and formatted. **Indicator 1.1.2.:** Number of ecosystem change models and datasets created or converted into formats readily accessible for regional assessment.
Outcome 1.2.: Conservation planning methods allowing regional assessment of representation losses resulting from	Conservation planning algorithms, including Network Flow, Marxan and Zonation exist for optimizing	Network Flow, Marxan and Zonation conservation planning software are tested for application at continental	**Output 1.2.1**.: Methodology for assessment of representation losses in terrestrial protected areas developed and

Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
species range shifts and ecosystem changes developed and readily available. **Indicator 1.2**.: Method for regional conservation planning for climate change available to regional assessment teams.	representation of species and ecosystems in protected areas. All have been tested for protected areas planning for climate change at national or sub-national scales, but none have been applied or tested at continental scales.	scales for regional assessment. The best performing methods are adapted specifically for regional assessments, or hybrid or novel methods that outperform existing methods developed and made available. The conservation planning software can assess loss of species and ecosystem representation and generate recommendations for siting of new protected areas to minimize representation loss.	peer-reviewed **Indicator 1.2.1**.: Methods manual for regional assessment of representation losses (species and ecosystems) available to regional assessment teams. **Output 1.2.2**.: Methodology for protected areas system planning to compensate for representation losses developed and peer-reviewed. **Indicator 1.2.2.:** Methods manual for regional protected areas planning to maintain representation in the face of climate change available to regional assessment teams.
Outcome 1.3.: Regional assessment teams have coarse scale information needed to understand priority areas for protected areas system planning to counteract loss of representation due to climate change. **Indicator 1.3.:** Regional maps of high risk areas available.	Diverse methods exist to assess where to site protected areas to compensate for climate change. Results of these competing methods are not systematically compared, and level of agreement between methods is unknown. Identification of areas at risk according to multiple methods is impossible.	Preliminary, coarse scale conservation planning is available for the three regional assessments. The coarse-scale results are based on multiple lines of evidence concerning species and ecosystem change, and on conservation planning software tested for climate change. Systematic combination and comparison allows quantifying level of agreement between methods for the first time. Preliminary identification of areas most at risk is available, allowing the three regional assessment teams to focus resources on taxa and geographies especially important in each region.	**Output 1.3.1.:** Coarse scale conservation planning conducted for the three regions. **Indicator 1.3.1.**: Number of geographies and taxa identified as most in need of regional assessment.
Component 2: Regional fine scale assessment and research-to-policy briefs			
Outcome 2.1.: Regional assessments produced by teams of leading scientists	Country and occasionally multi-country assessments of climate change impacts	Regional assessments are available, providing context that enables efficient	**Output 2.1.1.:** Regional analyses using multiple lines of evidence available and

Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
from each of the three regions **Indicator 2.1.:** Regional assessment results available and published in the peer-review literature.	on protected areas are available. No continental-scale assessments are available for the tropics. Inefficiencies in assessment mount as country-level assessments duplicate regional analyses critical for context. Inefficiency in protected areas actions for climate change resilience mount as some countries have no assessment and some have country-level assessment with incomplete context. Data available in the region isn't always effectively applied, because regional priorities are unknown. The best regional expertise is not applied to interpretation of results due to reliance on national and in-house resources.	country-level assessments and actions. All countries have regional protected areas context and country-specific assessment of species and ecosystem change. Efficient country assessments result as regional assessments provide context that does not have to be repeated by every country. Efficient country actions result because there are no missing or incomplete country assessments of species and ecosystem change. A spectrum of evidence, from physical surrogates to species models to ecosystem simulations are available to all countries in the region. Data from large global datasets and expensive modeling efforts are available in simple GIS format for use in country assessments. Data in the region is effectively applied to geographies and taxa most critical to climate change resilience because regional priorities are known. The best expert opinion in the region informs interpretation of the best available regional and global evidence.	published. **Indicator 2.1.1.:** Number of publications of regional assessment results. **Output 2.1.2.:** Potential for protected areas expansion to offset loss of representation identified. **Indicator 2.1.2.:** Number of potential priority areas for expansion of protection identified.
Outcome 2.2.: Research-to-policy briefs prepared and presented to government protected areas agencies. **Indicator 2.2.:** Number of multi-national and country research-to-policy briefs presented to protected areas agency staff	Relevant regional research is unavailable to most policymakers and technical decision makers in the tropics. Ad hoc studies at national or sub-regional level appear in the peer review literature. Published research takes several years to be peer-reviewed and published, resulting in research results being dated by the time they are available. The findings of published research do not systematically address the needs of protected areas staff for multi-taxa solutions using multiple lines of evidence	Protected areas policymakers and technical decision makers have access to systematic information on climate change and priorities for climate change response. The research is peer-review journal caliber, but reaches protected areas agency staff directly, without lengthy review and publication delays. Priority geographies for multi-national collaboration on protected areas adaptation directly reach relevant staff in the form of research-to-policy briefs. This puts state-of-the-science research	**Output 2.2.1.:** Research-to-policy briefs delineating multi-country technical issues and multi-national collaborative response opportunities associated with species and ecosystem changes produced and presented. **Indicator 2.2.1.:** Number of multi-national research-to-policy briefs distributed. **Output 2.2.2.:** Research-to-policy briefs on country technical issues and

Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
	and the latest climate models. Headquarters protected areas planners sometimes access the peer-review literature, but often do not. Field-level protected areas managers seldom access peer-review climate impact literature.	immediately into the hands of policy and decision makers. The research results are interpreted in regional context and for policymakers and technical staff rather than for academic research audiences of journals, making it immediately more relevant for actual agency policy and planning, and management decisions.	opportunities for protected areas adaptation presented to government protected areas management agencies. **Indicator 2.2.2.:** Number of country research-to-policy briefs presented.
Outcome 2.3.: Decision support tools for visualization and interactive use of research results produced. **Indicator 2.3**: Decision support tools developed and disseminated.	Protected areas agencies in the tropics lack interactive tools for climate change decision making. This is a particular limitation for systematic planning of species and ecosystem representation in protected areas for climate change, because each decision about placement of a new protected area affects all subsequent decisions. Without the ability to explore species and ecosystem movements, policymakers and planners are unable to explore options that might offer greater political feasibility or social benefit.	A decision support tool allows policymakers and planners to query climate change and protected areas research results. This interactive tool will allow exploration of multiple options and decision consequences on a mid-level laptop computer. The species and ecosystem representation improvements from designation of possible new protected areas can be assessed and alternatives explored. Where there is sufficient natural habitat for protected areas expansion, this tool will help define design options both for current representation and for representation as climate changes. Policymakers and technical staff will make better-informed decisions about new protected areas and will be more likely to factor climate change into those decisions.	**Output 2.3.1.:** Option-exploration decision support tool developed and protected areas policymakers and planners trained in its use. **Indicator 2.3.1.:** Number of protected areas agency staff trained in and using decision support tool.
Component 3: Monitoring and Evaluation			
Outcome 3.1.: Participatory M&E framework and an informative and proactive feedback mechanism integrated at all levels of project management.	Leading regional scientists work independently of one another, moving knowledge of climate change, impacts on biodiversity and consequences for protected areas ahead incrementally. Knowledge in climate change science such as from regional climate models is	Leading regional scientists work together, using an active monitoring framework to help move knowledge ahead synthetically. Knowledge links across disciplines is actively sought out and connections facilitated by the monitoring framework. An integrated	**Output 3.1.1.:** Project monitoring system operating and systematically providing information on progress in meeting project output and outcome targets. **Indicator 3.1.1.:** Number of adaptive

Expected Outcomes and Indicators	Project Baseline	End of Project Target	Expected Outputs and Indicators
Indicator 3.1.: Monitoring plan completed and reflected in data compilation and regional assessment work plans.	slowly adopted by climate change biologists, and in turn information on species and ecosystem movements are slowly adopted by conservation planners. Dissemination across disciplines is largely through the published literature.	work plan allows advances in climate science, climate change biology and protected areas planning to advance in coordination. Scientists will work directly with one another across disciplines, short-circuiting the usual information dissemination through the literature.	project management decisions in response to monitoring system information.
Outcome 3.2.: Adaptive implementation of regional assessments. **Indicator 3.2.:** Number of adaptations to regional assessments based on learning from other regions.	Protected area and country-level studies of climate change slowly accumulate to provide a picture of regional effects and opportunities for protected areas adaptations in the three tropical regions. Cross-regional learning occurs through the literature and at professional congresses.	Scientists in the three major tropical regions systematically learn from one another. Regional assessments adapt based on experience and transmit those lessons to other regions. Knowledge mapping and adaptive management provide information about improvements that can be implemented as the project progresses. Sharing of insights across regions speeds regional learning.	**Output 3.2.1.:** Multiple knowledge-mapping products defining portable knowledge gained from each regional assessment, and mapping knowledge flow and information products for each regional assessment. **Indicator 3.2.1.:** Number of instances of information or knowledge discovery in regional assessments identified in knowledge mapping.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Questions	Secretariat Comment to be addressed by time of CEO Approval	Response
4. Is the project aligned with the focal area/multifocal areas/ LDCF/SCCF/NPIF results framework and strategic objectives? For BD projects: Has the project explicitly articulated which Aichi Target(s) the project will help achieve and are SMART indicators identified, that will be used to track progress toward achieving the Aichi target(s).	Please indicate hectare coverage and ecosystem coverage for implementation of regional and country-level actions.	See Paragraph 103 in the ProDoc: Up to 5,000 species will be modeled, including 3,000 or more plants and 2,000 threatened or climate vulnerable vertebrates. Up to 150 ecosystems will be modeled, both as ecoregions and as plant functional types in Dynamic Global Vegetation Models.
6. Is (are) the baseline project(s), including problem(s) that the baseline project(s) seek/s to address, sufficiently described and based on sound data and assumptions?	Please expand and deepen for particular regions and countries where the project will work.	See Paragraph 55-61 in the ProDoc.
12. Is the project consistent and properly coordinated with other related initiatives in the country or in the region?	Please provide further details as regional and country-level actions are identified and designed.	See Paragraph 210-213 in the ProDoc.
13. Comment on the project's innovative aspects, sustainability, and potential for scaling up.	Please provide a more complete plan on the project's sustainability strategy post-project and how the participating executing agencies will promote uptake and use of the information produced by the project and its ongoing refinement and application.	See Paragraph 226 in the ProDoc.
17. At PIF: Is the indicated amount and composition of co-financing as indicated in Table C adequate? Is the amount that the Agency bringing to the project in line with its role?	Please seek to increase cash co-financing by the time of CEO approval of the MSP.	Co-financing increased from $2,467,000 to $3,655,992.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[7]

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:
NO PPG FUNDS DISBURSED TO CONSERVATION INTERNATIONAL PROJECT AGENCY

PPG Grant Approved at PIF:			
Project Preparation Activities Implemented	***GEF/LDCF/SCCF/NPIF Amount ($)***		
	Budgeted Amount	***Amount Spent Todate***	***Amount Committed***
Total	0	0	0

[7] If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used**)**

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)