

# ANNUAL WORKPLAN

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**SUSTAINING BIODIVERSITY CONSERVATION IN AND AROUND NYUNGWE  
NATIONAL PARK (NNP)  
ASSOCIATE COOPERATIVE AGREEMENT N<sup>o</sup> AID-696-LA-10-00001 UNDER LEADER  
COOPERATIVE AGREEMENT N<sup>o</sup> EEM-A-00-09-00007-00**

**March 1, 2013-February 28, 2014**



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# PROJECT SUMMARY

Project name: **Sustaining Biodiversity Conservation in and around Nyungwe National Park, Rwanda**

Associate cooperative agreement No.: **AID-696-LA-10-00001**

Cooperative Agreement period: **5 years**

Implementing organization: **The Wildlife Conservation Society**

Planning period: **March 1, 2013-February 28, 2014**

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# 1. SUMMARY

This document covers activities planned between March 1, 2013 and February 28, 2014 funded by USAID under the “Sustaining biodiversity conservation in and around Nyungwe National Park” associate cooperative agreement No. AID-696-LA-10-00001.

The overriding goal of this project is that Rwanda benefits from the conservation of wildlife and sustainable use of ecosystem services in Nyungwe National Park. The principal objective is to improve the capacity of the Rwanda Development Board (RDB) to sustainably manage the park’s resources and address specific threats (fire, poaching, timber harvesting) to the park and specific species of concern. To achieve this, WCS in collaboration with partners such as ARECO, ECOTRUST, IISD, REDO, and RDB will implement a number of strategies including:

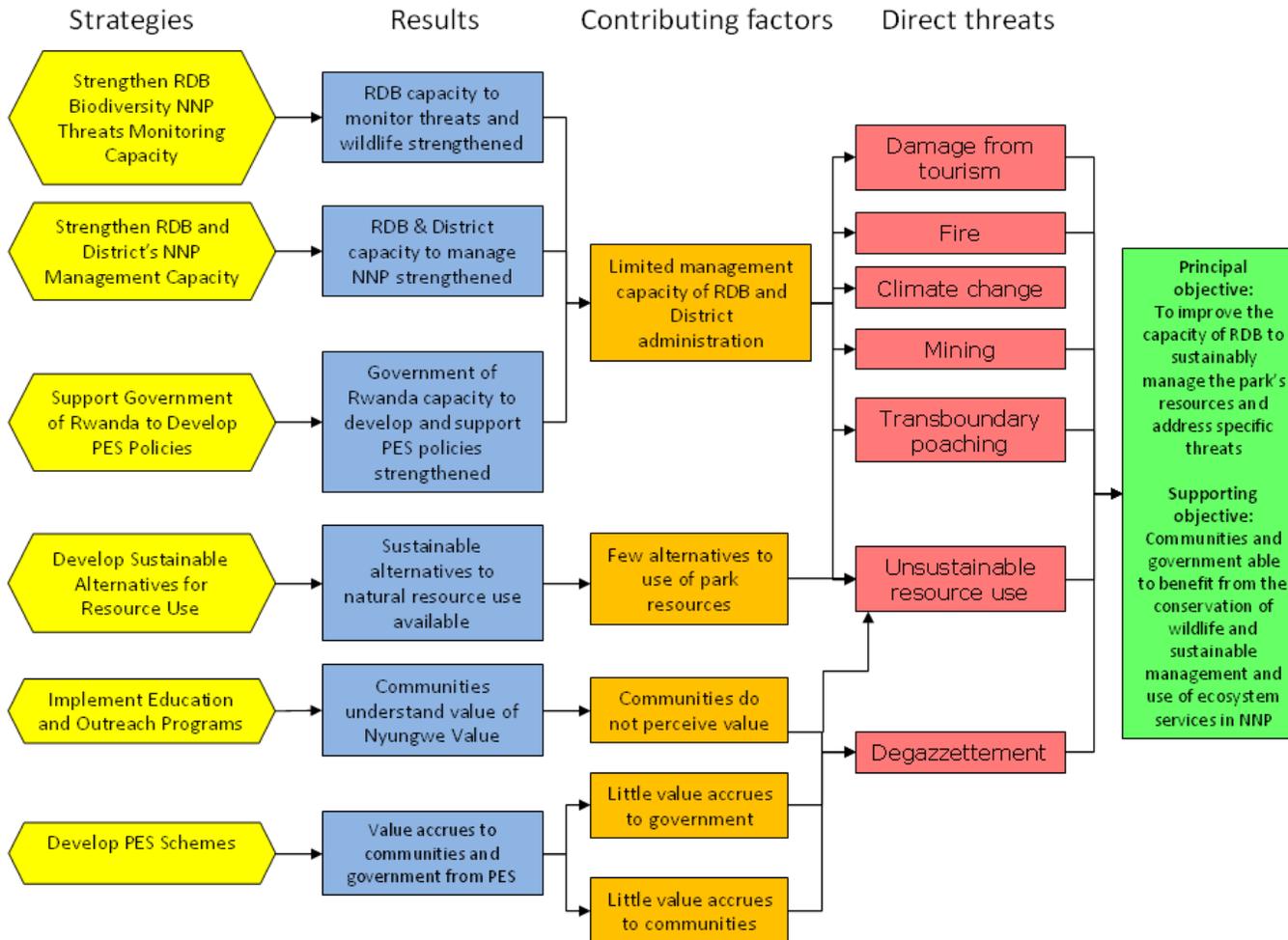
- Build capacity of Rwanda Development Board (RDB) personnel to monitor NNP biodiversity and threats;
- Build capacity of RDB and district administrations to understand, manage and resolve conflicts related to the use of natural resources, mitigate threats to biodiversity and manage tourism in NNP so as to seize opportunities while protecting the environment;
- Assist the Government of Rwanda, including RDB, the Rwanda Environment Management Authority (REMA), the Ministry of Environment and Natural Resources (MINIRENA), and other relevant government agencies and Ministries, in designing a legal and regulatory framework for Payment for Ecosystem Services (PES) while building the capacity at local and national levels to access ecosystem service markets and implement revenue sharing policies;
- Develop PES schemes that incentivize desired land uses by creating markets through which the users of environmental services compensate providers of those services;
- Introduce sustainable alternatives to the natural resource use and contribute to the conservation of this landscape while improving community livelihoods, including improving energy efficiency, putting in place alternative energy sources and developing new markets for conservation products;
- Implement education, outreach (social marketing) and park interpretation initiatives targeting dropout youth and other vulnerable groups such as women and minorities to enable them to better understand the value of Nyungwe.

This project aims to achieve six key main results:

1. *RDB capacity to assess and monitor threats and wildlife is strengthened;*
2. *RDB and Districts capacity to resolve conflicts, mitigate threats and manage tourism is strengthened;*
3. *Government of Rwanda capacity to develop and support Payment for Ecosystem Services (PES) policies is strengthened;*
4. *Government and communities are positioned to benefit from payments for ecosystem services (PES);*
5. *Sustainable alternatives to natural resource use are available;*
6. *Communities understand the value of Nyungwe.*

Strategies and activities described in the project document are aimed to address key threats to Nyungwe National Park as shown the figure below.

# THREATS ANALYSIS CHART



This project was initiated in March 2010. In the fourth year of project implementation we intend to build on the achievements of the previous three years in a number of key ways, as described below.

In relation to strengthening RDB's biodiversity and threats monitoring capacity, we aim to finalize the RBM/MIST handover process, completing the trainings (as deemed necessary), finalizing the translated RBM manual and providing continued support to ensure a smooth transition and the regular execution of the program as an important management tool for RDB. Additionally, following the presentation of 10 years of biomonitoring results, we will work with RDB in defining priorities for biomonitoring in NNP, including definition of methods and timeframes. Monitoring climate change will continue with the collection of data from the Climatological station, data analysis and results sharing.

In relation to conflict resolution, we intend to follow-up on the work initiated by IISD by rolling-out conflict mitigation capacity building to all park rangers as well as key community liaison partners including ANICO's and District Environmental Officers. We will continue monitoring the effectiveness of the ANICOs' work in mitigating conflict, following up on the recommendations that emerged from Y3 evaluation.

We will keep building on the relationship established with Kibira to ensure that 4 coordinated patrols take place in Y4, as well as to ensure the transfer of knowledge and lessons learned in both NPs.

Concerning forest regeneration, based on pilot testing of new equipment (powered trimmers) for clearing ferns, we have assessed the limited efficacy of the new approaches aiming at increasing the surface of regenerated forest and reducing the labor cost of this essential activity.

While we will continue with the previous, labor intensive method, in Y3 we successfully managed to leverage efforts with a local cooperative from Banda (*Le Pilier de la Nature et de la Promotion du Tourisme - PNPT*) to secure funds (from GEF-Small Grant Program) for additional regeneration work in NNP. In Y4, a significant increase of previously burnt forest under regeneration treatment will be achieved through this collaboration, as WCS will provide technical assistance to the Banda cooperative in order to secure effective and responsible fern clearing in the park.

In relation to both strengthening knowledge and actions related to payments for ecosystem services, we will move forward with the process of helping government develop a clear PES policy which will govern PES development in Rwanda, working through the PES Task Force. PES technical task force will continue to raise awareness of different stakeholders and will ensure coordination amongst various agencies and the efforts already underway in developing PES schemes in Rwanda.

Following the finalization of the Project Design Document (PDD) by ECOTRUST, submission to Plan Vivo is expected to produce further comments, as well as the process of validation by a third party. ECOTRUST will finalize the project accordingly and initiate the process of recruitment of first farmers that will join the project. For this ECOTRUST will work hand in hand with ADENYA, RDB, WCS and district staff throughout the whole process.

In relation to developing sustainable alternatives for resource use, we will continue to work with REDO to assess the feasibility of producing energy efficient stoves locally.

Finally, concerning our education program, we will move ahead with the implementation phase of using the materials developed in Y3 for schools and target community outreach groups. Teachers and community educators have been trained in the use of these materials. WCS education team will monitor the use of material produced during Y3, as well as organize targeted events around the park, with particular focus on the ‘high threat zones’. Other identified priority materials will also be produced and the necessary training for their use will be secured.

## **2. PROJECT MANAGEMENT**

### ***A. Staffing Plan***

Technical leadership and field coordination will be provided by the Project Director Chloé Cipolletta, who replaced Aaron Nicholas as the Chief of Party in October 2012. The team is composed of full time staff and Short Term Technical Assistance (STTA) coupled with technical and administrative support from WCS New York, Africa Program-based staff. All the staff to be involved in the project’s implementation are in place and their responsibilities have been set to ensure timely execution of activities and reporting as described hereunder.

The Project Director, Chloé Cipolletta, will have primary responsibility for the overall project management and coordination with, USAID, RDB, District leaders, and other partners including DAI. The Project Director will be supported by the WCS Country Director, Dr. Michel Masozera as well as the Monitoring and Evaluation Manager, Mr. Fidele Ruzigandekwe. The Monitoring and Evaluation Manager will be primarily responsible for tracking progress of all project activities against the revised PMP. Additionally, a Biodiversity Monitoring Manager, a Sustainable Finance Manager, Education Officer, Community Conservation officer and part-time of the Rwanda Country Program Finance Manager will also be devoted to project implementation. A number of consultants and partners will be used for specific activities such as woodlot development for carbon credits, education and outreach, distribution of efficient cooking stoves and development of markets for watershed services. Further details on key staff role in the project are described in the table below.

	Project Staff	Title	Responsibilities
<b>Long Term Staff</b>	Michel Masozera	Country Director	Responsible for country program management and ensuring better coordination between WCS, RDB, and other government agencies. Provides technical inputs to PES and community development projects as well as liaises with senior management of RDB and INECN on issues related to transboundary conservation and NNP.
	Chloé Cipolletta	Project Director	Chief of Party, responsible for the overall management of the project. Works closely with and reports to the Country Director. Provides technical leadership and coordinates all field project activity implementation and liaises with USAID, GOR and other partners such as DAI and other USAID projects.
	Fidele Ruzigandekwe	Monitoring and Evaluation Manager	Assists the Project Director in day to day program oversight- especially in terms of tracking progress against a revised PMP. Also acts as a key liaison with RDB.
	Felix Mulindahabi	Biodiversity Monitoring Manager	Supports the PCFN Director on biodiversity conservation tasks; leads the development and implementation of project monitoring of biodiversity and threats in NNP and the surrounding forest and buffer zone. Also provides technical assistance to park staff in biodiversity monitoring and reporting.
	Nicolas Ntare	Conservation and Research officer)	Assists the Biodiversity Monitoring Manager in implementing the Biodiversity Monitoring Plan and coordinates junior staff.
	Mediatrice Bana	Sustainable Finance Manager	Responsible for coordination, development and implementation of sustainable financing (focused primarily on PES) mechanisms in support of the long-term conservation of Nyungwe National Park. Assists when possible with the development and monitoring of community-based enterprises activities around Nyungwe National Park.
	Eugene Lusweti (VSO)	Education and Outreach Manager	Provides guidance and additional capacity for the Education and Outreach program in collaboration with Claudine Tuyishime and RDB CCW Wardens. Lusweti, who is on a voluntary contract through VSO intended for a period of 2 years starting January 2012, is leaving the project earlier (April 2013) due to family reasons and should be replaced by another volunteer.
	Claudine Tuyishime	Education Officer	Working with the Education Officer, is in charge of the implementation of the education component of the program. Coordinates project outreach with communities surrounding NNP, organizing meetings, workshops, and planning sessions with community leaders and other stakeholder groups.
	Vincent Hakizimana	Bee-keeping Development Officer	Acts as a key link between the project and various community target groups including honey harvesters, ex-poachers, livestock rearers, etc. Provides general support to community outreach programmes, a task which is expected to increase during the transition period of the new Education and Outreach Manager.
	Ngango Joseph	Administration and Finance Manager	Ensures project expenses are in accordance with budget plans. Ensures timely financial reporting.
	Celestin Sebashyitsi	Admin and Finance Assistant	Manages local project finances and prepares monthly field financial reports.
	Charles Karangwa	Logistics Officer	Coordinates logistics for project staff and STTA, including support to meeting planning, vehicle maintenance, etc.

<b>Short Term Technical Advisor and Backstopping</b>	<b>Project Staff</b>	<b>Title</b>	<b>Responsibilities</b>
	Graeme Patterson	WCS Africa Program Assistant Director	Provides technical and administration support at central office in New York.
	Ray Victurine	WCS NY headquarter Sustainable Finance Director	Supports Sustainable Finance team.
	David Wilkie	WCS Director, Conservation Support	Provides overall leadership and guidance to the education program.
	Nalini Mohan	WCS teacher training expert	Leads capacity building related to conservation education, material development and planning oversight for this programme.
	Tim O'Brien	WCS planning expert	Trains RDB and project team on planning and monitoring skills (taking over the responsibilities of Samantha Strinberg).
	Anton Seimon	WCS New York	Provides support on climate change monitoring and related training.
	Bill Weber	Consultant	Assists with evaluating overall project performance.
	PES policy specialist	Consultant	Works with different stakeholders to design a PES policy as a follow up to the work done by C. Kazoora.

## ***B. Coordination, management and partnership***

In year four of this project WCS will partner with ARECO RWANDA NZIZA, ECOTRUST and REDO in implementing activities related to community outreach, support to marginalized people, conflict mitigation and management and establishment of woodlots for the carbon market. To ensure that the full extent of partner expertise and participation is achieved, WCS works with DAI, USAID and RDB in convening project meetings. The group is expected to meet quarterly to share information and discuss ideas and issues and keep minutes of these. Additionally WCS will coordinate closely with the DAI, the ecotourism contractor. Joint annual work plan workshops will also facilitate synergies and coordination.

Implementing partners and their roles	Partner	Roles
	ARECO Rwanda Nziza	Provides support to the Conservation Education component of the agreement, especially in relation to training and monitoring material use and impact.
	ECOTRUST	Leads the process of developing a PES strategy linked to the establishment of small-scale woodlots in order to reduce pressure on the park. This year they will complete the framework for signing agreements with those interested.
	REDO	Leads the process of promoting the introduction of energy efficient stoves in two areas surrounding NNP. Also supports bee-keeping activities in the same target communities.

### 3. PROJECT ACTIVITIES

The project is described in the WCS program description under 6 different strategic areas. Activities planned for year 4 in each of these strategies and outputs areas are described below.

#### **Strategy I: Strengthening RDB's Biodiversity and Threats Monitoring Capacity**

Long-term monitoring of biodiversity and threats is essential in guiding park management decisions and assessing the effectiveness of conservation strategies. For this, Ranger Based Monitoring (RBM) was introduced in NNP in 2003, receiving the support from WCS over the past 10 years. With 75 rangers, who are regularly involved in park protection patrol and RBM data collection, 3 zones coordinators, a research and monitoring warden, and monitoring agent who are involved in RBM data entry and analysis, RDB is the natural executor and user of these activities. Under the current USAID Agreement, WCS and RDB have developed and agreed upon a 24 month work plan (started in June 2011), with the objective of transferring the knowledge, skills, and responsibility of ranger-based monitoring system from WCS to RDB. The process of strengthening the capacity of head of zones, ranger posts as well as the RDB Research and Monitoring Warden (through the provision of new equipment, software and necessary training to manage and analyze RBM data) progressed as planned during Y3. During Y4 the handover process will be finalized (by June 2013) through additional training as assessed necessary, as well as through support in data analysis, results interpretation and dissemination of information on a regular basis with districts, ANICOs and DEOs in order to find common solutions and commitments to mitigating various threats. Regular monitoring and *ad hoc* assistance will be secured following the handover in order to address eventual problems and ensure a smooth transition.

During previous years, priority has been given to threat monitoring and RBM handover. However, biodiversity monitoring is equally important as it allows park managers to assess the impact of conservation strategies towards protecting the animal population. While RDB rangers regularly record data on species identification and location, the use of this data has yet to have been exploited. During this year, we aim at convening a follow up workshop assessing data collection quality, and if needed, conduct a refresher training on species identification and data collection, and proceed in developing a format for data analysis and results presentation. Additionally, the workshop planned in Y4 will focus on training WCS and RDB staff in research/survey design, database management and analysis, as well as in designing a systematic biomonitoring plan, in order to resume the long term monitoring of Nyungwe's key species. This will likely entail a review of transect locations, the inclusion of camera traps as well as other design adjustments.

Capacity building in relation to monitoring climate change is also planned, focusing on the management and analysis of the data from the climate station built in Y3.

Proposed activities for year 4 under this strategy are outlined in the table below.

<b>Outputs</b>	<b>Activities</b>	<b>Completed by Date</b>	<b>Staff</b>	<b>Partners</b>	<b>Indicator</b>	<b>Targets and Milestones</b>
<b>I.1: Biological Surveying capacity of RDB Staff is strengthened</b>	Train WCS and RDB staff in research/survey design, database management and analysis	May 2013	Felix/ Nicolas/Tim	RDB/ KCCEM	# of people receiving USG supported training in natural resources management and/or biodiversity conservation	10 RDB & WCS staff trained
	Prepare & design detailed biodiversity survey for NNP with RDB	Sept 2013	Felix/ Nicolas/Tim	RDB		Biodiversity survey designed and budget detailed
	Produce/secure training manuals to provide guidance on research protocols and data management	Sept 2013	Tim/Felix/ Nicolas	RDB		1 training manual produced (10 copies distributed)
<b>I.2: The Capacity in Park Protection and threat monitoring and assessment for RDB staff is strengthened</b>	Finalise RBM/MIST handover and monitor its use for effective park management	March 2013 to June 2013 for handover; Through February 2014 for monitoring	Felix	RDB/KCCE M	% RDB patrols guided by analysis of MIST data	60%
	Organise refresher course in GIS and MIST for HZ and RM wardens	May 2013	Felix	RDB/KCCE M	# of people receiving USG supported training in natural resources management and/or biodiversity conservation	10 RDB staff trained in GIS MIST
	Facilitate the sharing of RBM results on a quarterly basis among RDB/NNP departments and key partners	Each quarter	Felix	RDB		4 translated quarterly reports disseminated
<b>I.3: Capacity to monitor and model climate is strengthened, and baseline assessment completed</b>	Secure regular data collection, extraction, quality control and analysis of climate data at Uwinka & Bigugu stations	March to December 2013 (report by February 2014)	Felix	RDB		Climate data analyzed, report available

## **Strategy II: RDB and Districts' capacity to manage conflict, mitigate threats and manage tourism is strengthened**

Sustaining biodiversity conservation in and around NNP requires firm strategies to manage conflicts and mitigate threats. These conflicts and threats stem mainly from the pressures of the high demand in natural resources from a rapidly growing and poor surrounding population for subsistence. Illegal harvesting of these resources creates friction between park managers who are trying to reduce illegal activities, and the local communities who rely on these resources for their survival. Some costs to living in proximity to NNP, such as crop raiding by wild animals, exacerbate conflict, while at the same time some of the benefits (in terms of tourism revenue sharing as well as ecological services) are often not sufficiently understood.

Over Year 3 of the project, WCS in partnership with IISD has continued to support RDB and local communities to understand, manage and resolve conflicts as well as to promote the participation of local communities in the conflict mitigation processes. Conflict mitigation trainings were conducted and a pro-active attitude to conflict management was promoted. WCS continued also supporting RDB in the further development of the ANICO network as a means of improving the collaboration with communities in all sectors surrounding the park.

Building on these achievements, during Y4 the focus will be on monitoring the implementation of the various aspects of the conflict mitigation strategy, organizing refresher training for ANICOs (including newly recruited ANICOs) in matters related to conflict mitigation strategy, compensation and environmental laws, park management aspects and revenue sharing opportunities. Local forums for addressing conflicts and improving park - community relationships will be organized by ANICOs and DEOs (with WCS and RDB support), with the objective of creating a platform for addressing and finding common, long term solutions to conflict related issues.

Implementation of the Fire Management Plan (finalized and disseminated during Y3) is also a priority for Y4. Two of the three outlined goals of the plan are ongoing activities which will continue in Y4. The first goal concerns prevention. This is achieved through continued facilitation of sensitization meetings with the surrounding population, seeking strong involvement from the local authorities and law enforcement agencies. While these activities are executed year round, a special effort is secured before the start of the dry season, in order to convey the needed messages to prevent new human-induced fires from ravaging the park.

Goal 3 of the fire management plan involves the regeneration of the forest affected by wild fires. In an effort to improve the biophysical condition of degraded areas, during Y3 the project piloted trials for more cost-effective techniques for fern clearing and the regeneration of areas damaged by wildfires using powered trimmers. Unfortunately this approach has not proven successful as these machines were not adaptable to the terrain and the ferns vegetation of NNP. Thus, Y4 activities will focus on sustaining the regeneration activities initiated in previous year (it takes 3 years to secure the regeneration of a plot). Additionally, during Y3 we successfully managed to leverage efforts with a local cooperative from Banda (*Le Pilier de la Nature et de la Promotion du Tourisme* - PNPT) to secure funds (from GEF-Small Grant Program) for additional regeneration work in

NNP. In Y4, a significant increase of previously burnt forest under regeneration treatment will be achieved through this collaboration, as WCS will provide technical assistance to the Banda cooperative in order to secure effective and responsible fern clearing in the park.

As far as the implementation of Goal 2 of the fire management plan, involving firefighting (training and equipment) WCS and RDB are in the process of discussing possible contribution of the New Forest Company (in charge of the management of the buffer zone) to this component of the plan, as it pertains also the safety of their products.

With regard to security issues and mining, a high level security meeting (involving police, army, prosecutors and RDB) and field tours to some key affected areas in and on the park boundary were organized for key partners (Districts, Army, Police etc), whereby firm commitments were drawn together in the form of a joint commitment to coordinated action to mitigate the various threats (specifically mining and poaching) in and around Nyungwe. Follow up on the recommendations emerged from the law enforcement meeting and the mining visit will be secured during Y4.

In Y4 WCS will continue providing support to user groups (bee-keepers, potters, bamboo harvesters, ex-poachers/livestock groups) around Nyungwe to facilitate linkages with relevant partners and government programmes, as well as help organise the groups and register them as legal entities such as cooperatives and associations.

A framework for tourism impact monitoring in NNP was developed in partnership with DAI and in Y3 WCS supported technical training in this matter in order to ensure that low-impact habituation techniques are both improved and maintained. During Y4 there will be regular follow up and ad hoc assistance provided when needed, but no specific activities are planned.

WCS will also continue to support regular planning meetings for coordinated patrols between Nyungwe and Kibira National Parks in order to address the trans-boundary aspect of shared threats such as mining, poaching, bamboo harvesting, as well as encouraging the sharing of lessons learned in NNP in tourism development and promote transfer of knowledge towards the neighboring park in Burundi.

Proposed activities for year 4 under this strategy are outlined in the table below.

<b>Outputs</b>	<b>Activities</b>	<b>Completed by Date</b>	<b>Staff</b>	<b>Partners</b>	<b>Indicator</b>	<b>Targets and Milestones</b>
<b>II.1: Capacity to understand, manage and resolve conflicts is in place</b>	Organise refresher training for ANICOs (including new recruits) and DEOs / including compensation and environmental laws / RS proposal development	May 2013	Claudine and Eugene	RDB	# of people receiving USG supported training in natural resources management and/or biodiversity conservation	40 ANICOs and 5 DEOs trained
	Provide equipment to ANICOs	June 2013	Claudine and Eugene	RDB		100% of ANICOs receive basic equipment to carry out their volunteers' role (raincoats, boots, notebooks, pens)
	Organise exchange visits for ANICOs within NNP and between parks	October 2013	Claudine and Eugene	RDB	# of people receiving USG supported training in natural resources management and/or biodiversity conservation	15 ANICOs (identified through the first year evaluation process) participating in exchange visits
	Evaluate RBD/DEOs'/ANICOs' effectiveness in mitigating conflicts	October 2013	Eugene and Claudine	RDB		Evaluation report on effectiveness in mitigating conflicts
<b>II.2: Communities participate in conflict mitigation processes</b>	Support ANICOs to organise local forums for addressing conflicts and improving park - community relationships	June to September 2013	Eugene and Claudine	RDB	# of people receiving USG supported training in natural resources management and/or biodiversity conservation	58 people (ANICOs and DEOs) organizing 6 forums in high threat zones (mining, bamboo cutting, poaching, fires, crop raiding)
	Support ANICOs and local authorities in the use of RBM results to sensitize community on NNP conservation	Quarterly	Eugene and Claudine	RDB		50% of ANICOs and DEOs use the information from the quarterly reports (assessed from the ANICO performance monitoring form)
	Support ANICOs in conflict mapping (in the cells with high threats bordering NNP)	May 2013	Eugene and Claudine	RDB		Conflict maps available for 25-29 cells with high level of threats
<b>II.3: Capacity to manage fire, and monitor mining and</b>	Facilitate outreach meetings between park managers, local authorities and law enforcement agencies on fire fighting and prevention	June 2013	Eugene, Claudine and Felix	RDB	# of people receiving USG supported training in natural resources management and/or biodiversity conservation	58 people (ANICOs and DEOs) involved in organizing 4 meetings before dry seasons, on fire prevention

<b>Outputs</b>	<b>Activities</b>	<b>Completed by Date</b>	<b>Staff</b>	<b>Partners</b>	<b>Indicator</b>	<b>Targets and Milestones</b>
<b>resource use impacts are in place</b>	Organize and facilitate trans-boundary quarterly coordinated patrol planning with Burundian counterparts	Quarterly	Nicolas	RDB, INECN	# of coordinated Nyungwe-Kibira patrols	4 coordinated Nyungwe-Kibira patrols carried out
	Provide support to user groups (bee-keepers, potters, bamboo harvesters, ex-poachers/livestock groups) around Nyungwe to facilitate linkages with relevant partners and government programmes / help organise the groups and register them as legal entities such as coops & associations	April 2013 (Nkungu) July 2013 (Nyamasheke)	Fidele for Nkungu; Eugene and Claudine for Nyamasheke	REDO, RDB	Number of individuals from all targeted user groups participating in the program with USG assistance	100 individuals reached
	Improve ecological conditions in areas that have been affected by wild fires in the past through forest assisted regeneration	March 2013-February 2014	Felix	RDB	# of hectares in areas of biological significance showing improved biophysical conditions as a result of USG assistance	12 ha recovered by end year 4
<b>II.4: Tourism impact monitoring program supports adaptive management of tourism program</b>	Support and monitor implementation of LAC methodology	March 2013-February 2014	Felix	RDB	# of people receiving USG supported training in natural resources management and/or biodiversity	16 RDB staff trained
	Reinforce chimpanzee tourism impact monitoring data collection and analysis	March 2013-February 2014	Felix	RDB		16 RDB staff trained

### Strategy III: Strengthening the knowledge and interest of the Government of Rwanda to develop and support PES policies

The review of institutional, legal and policy frameworks for developing PES established that Rwanda has, in general, young laws, policies and institutions for the management of its natural resources and the environment. It requires time, capacity and resources for them to deliver their intended purposes. Many of them are also supportive of conservation of ecosystems. The review also highlighted that given the fact that the majority of Rwandans are smallholders, any PES schemes would have to be very competitive when compared to what households derive from agriculture, some of which could be unsustainable in the short run. Accordingly, any practical and long term PES schemes in Rwanda would have to demonstrate high potential for poverty reduction, agricultural productivity and resilience, food security, and above all, capacity to reduce loss of Rwanda's critical natural asset - its top soil. All of these services and benefits are directly linked to sustainable management of Rwanda's water resources. Last year we worked with REMA and other stakeholders involved in the PES task force to create awareness, particularly on the added value PES brings to the policy and developmental agenda in Rwanda. Through the PES task force meeting stakeholders identified the need for a PES policy. The merit of developing a PES policy in its own right is to bring clarity of provisions from very many laws, regulations, orders and practices into a single platform of reference necessary in attracting and guiding investments into PES schemes.

In year 4, WCS and the PES Technical Task Force will lead discussions on defining strategic objectives for PES development in Rwanda. Specifically discussions will focus on how PES concepts contribute to relevant national development objectives (e.g. water & hydroelectricity provision, tourism development, climate change mitigation, forest management & conservation, rural development). The PES technical task force will continue to raise awareness of different stakeholders and will ensure coordination amongst various agencies and the efforts already underway in developing PES schemes in Rwanda.

Proposed activities for year 4 under this strategy are outlined in the table below.

Outputs	Activities	Completed by Date	Staff	Partners	Indicator	Targets and Milestones
<b>III.1: The Government of Rwanda has the knowledge and interest in establishing effective PES policies that fully support implementation of PES schemes and ensure that values equitably accrue to both government and communities.</b>	Organize bi-annual PES taskforce/working group meetings	June 13 and December 13	Michel, Mediatrice	REMA, RDB, USFS		Report of Task Force / Working Group available
	Work with government to draft and lobby to secure the approval of PES policy and law for Rwanda	Ongoing until February 2014	Mediatrice and Michel	REMA, RDB		Strategic objectives for PES development defined

#### **Strategy IV: Develop (design and implement) a system of payments for ecosystem services (PES)**

The main focus of this component is to design payment mechanisms for ecosystem services with an emphasis on watershed services and carbon offsetting.

In general, only a portion of the benefits from environmental services is transformed into actual demand and made explicit by an existing willingness to pay to secure these services. Willingness to invest is highest when disruptions in supply are already evident and substantial investment in terms of financial inputs and time is needed to restore it. Willingness to invest can also arise in the advent of threat (i.e. when there is high pressure on forests, which threatens the current, still intact, provision of forest environmental services). However, without specific policy support and financial innovation, large portions of the demand for forest environmental services remain latent or untapped (e.g. carbon sequestration, scenic beauty and biodiversity support).

In order to raise the awareness of the demand side (direct and indirect beneficiaries) WCS is using three key strategic approaches: development of a carbon management scheme for rural communities, mapping of ecosystem services (especially hydrological services) originating from Nyungwe National Park under current conditions and identification of key beneficiaries.

In partnership with ECOTRUST Uganda, the feasibility study findings for the carbon management scheme for rural communities around NNP were presented to stakeholders and reviewed to include land cover change, the project financial analysis, proposals of benefits sharing and project institutional arrangement with roles of different players. In year 3 required project design documents to be submitted to Plan Vivo were developed. The next steps will be the finalization of the Project Design Documents (PDD) following Plan Vivo comments, the validation of the PDD by a third party and the recruitment of the first farmers that will join the project. For this ECOTRUST will work hand in hand with ADENYA, RDB , WCS and district staff throughout the whole process until identified farmers are sufficiently informed and recruited by the end of Y4.

As for Nyungwe watershed services, Todd Gartner from World Resources Institute with WCS conducted a survey that aimed at assessing the importance of ecosystem services provided by Nyungwe National Park to different stakeholders. Specifically, the survey aimed to 1) identify the primary beneficiaries; 2) assess their interactions with and perceptions of NNP and its management; 3) capture beneficiary understanding of the threats, trends and connection between ecosystem service and business risk and 4) identify interest in continued engagement.

Building off momentum from a workshop following the survey, WCS, RDB, WRI and USAID outlined necessary steps to further explore the applicability, challenges and details associated with the development of a NNP sustainable financing mechanism. Eight categories and associated steps which should be considered moving forward have been identified: 1) Biophysical and Economic assessments, 2) Legal and policy framework, 3) PES awareness and outreach, 4) Development of Nyungwe Business Plan, 5) PES implementation, 6) Monitoring and evaluation, 7)

Document PES and share Lessons Learned, 8) Build the Capacity and replicate the model. These steps are generally chronological and take time, though many stages will run in parallel and may change organically as data and resources become available and lessons are learned. The first four steps will help build the foundation for a sustainable financing mechanism. Biophysically, these efforts will identify baseline conditions, threats, trends, priority areas and associated interventions. Economic analysis will highlight potential lost value and business risk under a variety of land-use change scenarios. Finally, infrastructure-related steps will focus on engaging the necessary stakeholders and setting up the appropriate policies through new and existing institutional arrangements. This is a multi-year process: interim benchmarks will be identified with the concerned stakeholders to ensure progress is being made and adapt as necessary.

In year 4, biophysical and economic assessments of Nyaruguru sub-catchment and the validation of WASSI-CB model results (initiated in year 3) will be completed and results presented to stakeholders. In addition, following informal communications with the private sector and the recent beneficiary survey, physical mapping of local beneficiaries of Nyungwe ecosystem services will be the next step. This exercise will help to understand how businesses' location and scale in the landscape relates to their use and perception of ecosystem services and to their potential motivations to make investments. Their willingness to pay will be assessed through cost benefit analysis of land use change for 3 major businesses and one-on-one discussions for partnership and investment. The private sector working group, composed primarily of business operators located around Nyungwe, will be reconstituted and expanded to other beneficiaries. WCS and the PES technical task force will continue to support private sector working group to facilitate action, help address gaps in awareness and understanding and catalyze progress towards a large-scale sustainable financing mechanism.

Proposed activities for year 4 under this strategy are outlined in the table below.

<b>Outputs</b>	<b>Activities</b>	<b>Completed by Date</b>	<b>Staff</b>	<b>Partners</b>	<b>Indicator</b>	<b>Targets and Milestones</b>
<b>IV.1: Payment mechanisms for ecosystem services designed, with an emphasis on watershed services and forest-carbon</b>	Complete Project Design Document for small-holder tree planting as a land use strategy and carbon stock	April-June 2013	Mediatrice	ECOTRUST REMA, RDB, districts		1 PDD report and 1 validation report
	3rd party validation and project registration	July 2013	Mediatrice	ECOTRUST REMA, RDB and ADENYA		Project registered in carbon registry
	Finalise the facilitator's manual (adapted to the Rwandan context)	September 2013	Mediatrice	ECOTRUST		Facilitator's manual available
	Build capacity of local stakeholders (RDB, ADENYA, district) to manage the carbon scheme for farmers around Nyungwe	March and May 2013, January 2014	Mediatrice	ECOTRUST	# of people receiving USG supported training in natural resources management and/or biodiversity conservation	6 people (government staff & civil society) trained in PES design
	Farmer recruitment	June 2013	Mediatrice	ECOTRUST		50 farmers recruited to join the carbon project
	Carry out physical mapping of location & scale (identification, measurement operations, including plantations, factories, infrastructures, etc.) for private sector stakeholders around NNP	April-July 2013	Mediatrice			Locations mapped for five major private sector stakeholders
	Carry out cost / benefit analysis of land use change for major beneficiaries	October-November 2013	Michel			Cost benefit analysis for 3 major businesses completed
	Facilitate and support private sector forum meetings on PES around NNP	December 2013	Michel			1 meeting held with at least 10 different business institutions

## **Strategy V: Develop Sustainable Alternatives for Resource Use**

Deforestation based on the demand of fuel wood for the population surrounding NNP continues to pose a threat to the park. While tree planting and woodlots address the supply side, WCS recognizes the importance of addressing the demand side as well. In Year 3, WCS worked in partnership with Rural Environment and Development Organisation (REDO) to pilot-promote energy efficiency stoves (EES) in the communities of Bweyeye and Nkungu (Rusizi district). REDO completed the dissemination of energy efficient stoves and monitored their adoption within 200 households in those communities. In this regard, 200 EES, locally known as “Canarumwe”, were distributed and a follow up survey was carried out to assess the level of adoption of this technology in these two villages. The results of the survey showed that using the EES has helped these households to save 14-16kg of wood use per month, and 700-4000 RwF per household per month (depending on the area as well as income category of the household). Based on the positive results of this assessment, WCS discussed the option of extending this experience to other households by locally availing these EES at lower cost through the construction of a kiln in the area (the distributed 200 EES had been purchased and transported from one cooperative located in Nyamasheke, about 50-60km away).

The proposed activities in this workplan are geared towards helping REDO assess the feasibility and environmental impacts of kiln construction in Nkungu sector and its efficient management by a local cooperative. Activities will also aim to find additional funding sources for kiln construction through the RDB Revenue Sharing Scheme, and hence allowing for the rapid scale up in the use of EES technology in the region.

During year three, WCS provided a sub-grant to ARECO-Rwanda Nziza to conduct a baseline study on bamboo development potential around NNP. The findings showed that the potential is high, and WCS had planned to develop a scheme of seedlings distribution under agreement with local farmers in year four. Unfortunately this activity requires more funds than expected, as it will not be implemented under the carbon project by ECOTRUST, as initially foreseen, for two main reasons. Firstly farmers in Nyaruguru area have small landholdings and therefore cannot mix bamboo with their crops. Secondly the carbon market potential of bamboo is not well established to provide enough incentives to enter into a carbon scheme. Last year, WCS convened a meeting at Kibeho with different local and national players in the forestry sector (including RNRA, RAB, RDB, DEOs etc), to discuss bamboo development in Nyaruguru district. The workshop recommended among other things, the necessity for better coordination of efforts to avoid duplication and to ensure success. For instance it was agreed that all stakeholders in bamboo development should work in collaboration with RAB to make sure that they plant the right species in the right place and that they use appropriate techniques. Participants agreed that the suitable bamboo species around NNP is the native bamboo.

WCS is therefore proposing to join efforts with the soon to start project (funded by Revenue Sharing funds) to support a local cooperative in the Nyaruguru District to establish a bamboo nursery. This will result in creating local availability of seedlings which could then be easily acquired by local farmers. WCS and RDB will provide financial and technical support to the District and the local cooperative and support in monitoring and evaluation of the project.

Proposed activities for year 4 under this strategy are detailed under each output below.

<b>Outputs</b>	<b>Activities</b>	<b>Completed by</b>	<b>Intervention areas</b>	<b>Staff</b>	<b>Partners</b>	<b>Indicator</b>	<b>Targets and milestones</b>
<b>V.1: Improved energy efficiency in villages around Nyungwe from introduction of fuel efficient stoves and alternative fuel sources</b>	Assess feasibility and environmental impact of EES kiln construction	June 2013	Bweyeye, Ruheru, Kivu sectors and Cyamudongo	REDO/Fidele	RDB		Feasibility study and environmental assessment available and circulated
<b>V.2 Creating incentives for reducing illegal bamboo harvesting</b>	Support coordination of bamboo initiatives in Nyaruguru district (initiate the collaboration, sharing of information and the identification of opportunities) to increase support to the area most sensitive to bamboo development (due to the illegal exploitation of bamboo in the park)	March 2013 through February 2014	TBD	Fidele	Nyaruguru district, Rwandan Natural Resource Authority, RDB		Areas suitable for bamboo development are mapped and roles and responsibilities of different stakeholders clarified
	Support to local community to develop bamboo nurseries	October 2013	Nshili area	Fidele, Vincent	Nyaruguru district, Rwandan Natural Resource Authority, RDB	Number of individuals from all targeted user groups participating in the program with USG assistance	200 individuals reached (community members receiving seedlings and cooperative members)

## Strategy VI: Implement Education and Outreach Programs

During the third year of the USAID project implementation, outreach materials and activities were designed together with the key stakeholders, and they were piloted and produced for use targeting the various segments of the community living around NNP. Additionally, good progress has been made in training the local educators (teachers and ANICOs) to play a bigger role in community education and outreach activities in schools and communities through use of the prepared materials and activities. In Y4, RDB and WCS will mainly play a supportive and monitoring role to the educators to ensure sustainability. Drama, poems, songs, competitions and church activities will be occurring in communities and schools around Nyungwe National Park using developed materials and activities listed in the outreach strategy. Local educators will take the lead assisted by WCS and RDB staff.

The implementation of the developed education and outreach strategy will be the key activity in helping inform, warn and discourage threat activities in order to help secure the NNP and the resources therein.

Proposed activities for year 4 under this strategy are detailed under each output below.

Outputs	Activities	Completed by Date	Intervention Areas	Staff	Partners	Indicator	Targets and Milestones
<b>VI.1: Students in formal education (primary and secondary) will adopt a positive/supportive attitude to park conservation efforts based on a clear understanding of the multiple values of NNP, reduce the adoption of unsustainable behaviors as they grow into adults, and act as advocates for the value of the Park and its conservation</b>	Monitor use of developed CE materials	March to November 2013	Sectors around NNP	Claudine, Eugene	RDB		200 students (20 students x 10 schools) participating in the program with USG assistance (using the CE materials)
	Prioritise and develop additional CE materials identified in the Outreach Strategy for using in schools	July-November 2013	Sectors around NNP	Claudine, Eugene	RDB, ARECO		500 copies of book; 500 thematic school materials
<b>VI. 2 : Education Output 2: Vulnerable groups (community members responsible for threat</b>	Design, create, pilot and adapt conservation materials and activities for use in outreach programme	June-July 2013	Sectors around NNP	Claudine, Eugene	RDB, ARECO		3 new outreach materials designed and produced

<b>Outputs</b>	<b>Activities</b>	<b>Completed by Date</b>	<b>Intervention Areas</b>	<b>Staff</b>	<b>Partners</b>	<b>Indicator</b>	<b>Targets and Milestones</b>
<b>behaviours in NNP) adopt a supportive attitude to the park and change their behavior based on understanding of the multiple values of NNP</b>	Implement and monitor conservation education and outreach programs for communities near NNP and carry out social marketing events (as defined in the strategy)	July, September 2013	Sectors around NNP	Claudine, Eugene	RDB, ARECO	# of individuals participating in the program with USG assistance	5,000

Annex 1: Budget Summary

<b>BUDGET ITEMS</b>	<b>USAID Project - Year 4 Budget</b>
<b>Personnel</b>	<b>\$ 275,666</b>
<b>Fringe Benefits</b>	<b>\$ 90,056</b>
<b>Travel</b>	<b>\$ 47,394</b>
<b>Supplies</b>	<b>\$ 24,817</b>
<b>Outputs based costs</b>	
<i>- Project Management costs including admin &amp; Logistics</i>	<b>\$ 51,167</b>
<i>- Strengthening RDB's Biodiversity and Threats Monitoring Capacity</i>	<b>\$ 16,207</b>
<i>- RDB and Districts' capacity to manage conflict, mitigate threats and manage tourism is strengthened</i>	<b>\$ 16,576</b>
<i>- Strengthening the knowledge and interest of the Government of Rwanda to develop and support PES policies</i>	<b>\$ 10,788</b>
<i>- Develop (design and implement) a system of payments for ecosystem services (PES).</i>	<b>\$ 10,000</b>
<i>- Develop Sustainable Alternatives for Resource Use</i>	<b>\$ 5,000</b>
<i>- Implement Education and Outreach Programs</i>	<b>\$ 22,338</b>
<b>TOTAL</b>	<b>\$ 570,009</b>

## ANNEX 2: FOURTH YEAR STTA AND STAFF FLIGHTS SCHEDULE

Origin	Destination	Purpose	No. trips	Tentative timing	Participants
USA	Kigali	Project coordination	1	Q1-2 (10 days)	Graeme Patterson
USA	Kigali	As a senior advisor to the project evaluate the overall project (25 year of conservation work in NNP) performance.	1	April-May (14 days)	Bill Weber
Kenya	Kigali	Train RDB staff in research/survey design, data management and analysis.  Support team in definition of a biomonitoring plan for next term monitoring (every 5 years, due 2015).	1	Q3 (8 days)	Tim O'Brien
Rwanda	Burundi	Planning for trans-boundary coordination	6	Each quarter (5 days per quarter)	Patrice Nzamuye, Louis Rugerinyange (RDB); Chloe Cipolletta, Michel Masozera, Fidele Ruzigandekwe and Nicolas Ntare (WCS- not all will travel each quarter)
Uganda	Rwanda	ECOTRUST support to woodlot development  ECOTRUST to assist in farmers' recruitment, awareness raising and training (also of ADENYA) on the carbon scheme project implementation	3  4	Q1 – Uganda training (4 days)  Q2-Q4 –Rwanda meetings and training (approx. 20 days)	6 participants (3ADENYA, 1 RDB, 1 DEO, 1 WCS)  6 participants (3ADENYA, 1 RDB, 1 DEO, 1 WCS)  Names of participants TBD

### **ANNEX 3: LIST OF EQUIPMENT TO BE PURCHASED IN YEAR 4**

WCS field staff (regeneration work):

- Backpacks (16), uniforms (28), boots (45 pairs), for field monitoring staff \$2952

RDB RBM related support (last year support to secure handover finalization):

- Field solar charging units and battery chargers (5), AA rechargeable batteries (40) \$1150
- Garmin GPS *e-trix* (10) \$3149

ANICO equipment:

- boots (54 pairs), raincoats(10), and assorted writing materials \$1295

## LIST OF ACRONYMS

AOTR	Agreement Officer's Technical Representative
CCW'S	Community Conservation Wardens
DAI	Development Alternatives Incorporated
EES	Energy Efficient Stoves
FMP	Fire Management Plan
GEF	Global Environmental Facility
GEF-SGP	Global Environmental Facility-Small Grant Program
GIS	Geographical Information System
HZ	Head of Zones
IISD	International Institute for Sustainable Development
LEM	Law Enforcement Monitoring
M&E	Monitoring and Evaluation
MIST	Management Information System and Technology
NNP	Nyungwe National Park
PAC	Project Advisory Committee
PCFN	Projet Conservation de la Forêt de Nyungwe
PES	Payments for Ecosystem Services
PNPT	Pilier de la Nature et de la Promotion du Tourisme
RBM	Ranger-Based Monitoring
RDB	Rwanda Development Board
RM	Research Monitoring
RNRA	Rwanda Natural Resources Authority
STTA	Short Term Technical Assistance
TBD	To Be Determined
TF	Task Force
ToR	Terms of Reference
USAID	United States Agency for International Development
WCS NY	Wildlife Conservation Society New York
WCS	Wildlife Conservation Society