



Proposal to the African Elephant Fund

- 1.1 Country: Rwanda
- 1.2 Project Title: Elephant collaring for their security and fence integrity to reduce human/wildlife conflicts in Akagera National Park, Rwanda
- 1.3 Project Location: Akagera National Park, Eastern Province, Rwanda
- 1.4 Overall Project Cost: \$193,601
AMOUNT Requested from African Elephant Fund: US\$72,675
- 1.5 Project Duration: 2018
- 1.6 Project Proponent: AKAGERA MANAGEMENT COMPANY
- 1.7 Name of Project Supervisor: Mr Jes Gruner
- 1.8 Address of Project Supervisor: Akagera National Park, P.O Box 1448, Kigali
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- 1.11 Fax: NA
- 1.12 Date proposal submitted: 21/11/2017

2.0 Project Summary: (not more than 250 words)

Collaring Elephants

Collaring of 6 elephants to ensure their security as the increasing population in Akagera National Park has resulted in splinter groups. Knowing their whereabouts will improve the deployment of rangers to the appropriate vicinity and ensure management can at all times have an almost real time understanding where the herds and key bulls are in the park as the collars will be satellite linked. As they are satellite collars there will be the purchase of a desktop to monitor and plot elephant movements. To get visual sightings which is also paramount the rangers on the ground will be provided with 2 motorbikes and 2 VHF receivers.

Integrity of the fence

Akagera has a 120km solar electric fence along its western boundary and since its erection in 2013 there have been no cases of human/wildlife conflict in the communities with relation to elephants, whereas before it was a daily occurrence. To keep this success it is imperative to keep the fence voltages constant and high so as to ensure the elephants get an appropriate shock if they ever challenge the fence. Batteries need to be replaced every 2 years and vegetation sprayed and cleared twice a year.

Akagera National Park is seeking support to purchase batteries and chemicals to ensure good power in the fence along with funds for collaring 6 elephants and provide equipment to be able to monitor the elephants accordingly.

3.0 Which Priority Objectives and Activities (there may be more than one) in the African Elephant Action Plan does this project fall under? (For ease of reference, Priority Objectives are attached under Appendix 1)

Objective 1: Reduce Illegal killing of elephants and illegal trade in Elephant products

Strategy 1.1: Strengthen the capacity of law enforcement;

Activity 1.1.3 : Equip wildlife authority staff on the frontline of enforcement with appropriate tools to carry out their mission as safely and effectively as possible.

By collaring 6 key individuals the park management can get a day-to-day proximity of the elephants and guide law enforcement activities around such locations thus reducing the risk of illegal killing of Akageras elephants

Objective 2: Maintain Elephants habitats and restore connectivity

Strategy 2.4 Ensure adequate maintenance of current elephant habitat

Activity 2.4.2 improve or maintain good management in existing protected areas in the African Elephant range.

Collaring will streamline management and ensure appropriate deployment while handheld receivers will allow rangers in the field to locate the elephants

Objective 3: Reduce Human-Elephant conflict (HEC)

Continue to maintain the fence with simple vegetation removal and grass growth.

This requires chemical weeding to stop the growth of the grass to ensure electric fences in the fence are constant

4.0 Project Rationale – why is this project necessary and urgent? What threats face this elephant population (give, for example, what information you have regarding population details, trends in population (downward or upward), ivory seizure information, details about levels of poaching, human/elephant conflict, etc.).

Elephant Collaring

Population status is at approximately 100 with a steady growth and lots of young. Historically there was about 75 elephants when Akagera Management Company took over in 2010. These elephants were all together with exception of a few bulls. This was due to insecurity, snaring, intensive illegal activities happening in the park, and the continual chasing of the elephants by rangers and communities during crop raiding ventures.

Today these animals are starting to feel secure and exploring parts of the park they never frequented before due to risk of being harmed. They are fragmenting into sub family groups and as much as the park is safer the risk of poaching can't be overlooked so it is paramount to have a number of matriarchs and large bulls collared for their security. 6 Collars were installed in 2014 and 2 have completed their cycle while the other 4 are still working on VHF but no longer on Satellite collars

Akagera has further been put on the international spotlight with the good conservation initiative of re-introducing the black rhino but unfortunately with this comes the inherent increased risk that Akagera is at greater threat from illegal entities seeking ivory, rhino horn or any other high value wildlife product.

It is paramount to have a good understand where the elephant populations are within the park.

Integrity of the fence

In 2013 the Rwandan Government invested in erecting a solar electric fence on the western boundary of the park (east is a natural boundary totally closed by lakes and swamp). This investment was over US\$2.4 million.

From completion of this there has not been one human/wildlife conflict related to elephants outside the park as historically this was a daily occurrence. No elephant has broken out of the fence. This is due to the investment made but more critically to the persistent monitoring of the fence and ensuring it is always functioning day and night. Twice annually the fence has to be cleared from any grasses and weeds. This is critical to ensuring there are not short circuits and loss of power on the fence along the entire 120km stretch.

5.0 Detailed Proposal – including activities to be carried out, milestones (at least quarterly milestones), timelines, equipment to be purchased , reporting procedures, etc. (not more than 1000 words). It will be helpful in evaluating this Project Proposal if you to divide it into Phases such as Planning; Procurement; Implementation; Evaluation and Reporting

Akagera Management Company (AMC) is a Public Private Partnership between the Rwanda Development board (RDB) and African Park Network (APN). RDB has given the mandate for AMC to manage Akagera National Park in its entirety for 20 years. The agreement between the partners commenced in 2010 and there has been a huge amount of work securing the integrity of the park, improving infrastructure, management, training of staff, promotion of tourism and more recently the successful re-introduction of lion and black rhino back to Akagera.

Elephant collaring

Akagera Management collared 6 elephants in August 2014 to get a better understanding of the elephant dynamics, movements and to strategies better law enforcement focus on the areas where the elephants are. So far the presence of the rangers in the field and strategic patrol coverage has successfully resulted in there being no loss of elephants due to illegal activities. These satellite collars have now ceased to operate with exception of 4 giving off a VHF signal. As the population is getting bigger and the herds are splitting into sub families due to increased security and recognition of safety it is paramount to keep going with the system and replace the 6 collars along with get some additional equipment that can help with the reliable monitoring of the elephants such as 2 motorbikes and a new VHF receiver. In the control room where the elephants will be monitored digitally it will be paramount to have a reliable desktop to monitor the elephants and produce appropriate maps.

Planning (January-March 2018)

If the funding is approved then the following applies;

Get quotes for 6 x satellite collars and receiver, one desktop and quotes for 2 x new Yamaha AG200 motorbikes.

Procurement (April-May 2018)

Procurement of satellite collars, receiver, desktop and motorbikes

Install collars onto elephants (August-Sep 2018)

Dr Peter Morkel probably the most experienced wildlife vet will come to Akagera for 7 days and with the aid of the park management and its equipment install the collars.

Evaluation and Reporting (October onwards for 2 years)

Once the satellite collars are installed they will be operational for 2 years and provided there are no misfortunes to the elephant with the collar we will be mapping movement monthly and deploying the rangers with the new motorbikes to the vicinity or elephant activities.

The vision is to improve the security of the elephants and the park and to have no losses of elephants in the coming years.

Final report on project (December 2018)

Implementation report and financial accounting of the project so as to close the funding

The overall benefit of the collaring with satellite collars is to be more efficient with strategic patrol coverage and presence of the rangers in the field, it makes monitoring the elephants visually easier and thus we can safely count numbers with relative accuracy, we can use a proactive approach if we notice they are too close to the fence and deter them.

The overall purpose of collaring the elephants is for their security and the project will be deemed a success in 2 forms.

- 1) Successful collaring of 6 elephants and monthly data tabulated
- 2) If after 2 years the status of the elephant population would have gone up and ideally with no deaths due to illegal activities. This will be reported in the aerial census of August 2019.

Integrity of the fence

Fences unfortunately are becoming a management tool in areas where the human wildlife interface has become a pure hard boundary. Rwanda is the most densely populated nation on mainland Africa and during the first 2 years of AMC having the management of the Akagera National Park it had 12 rangers permanently based on chasing elephants out of the community fields at night. This resulted in the elephants being incredibly nervous and aggressive to rangers, them all being together in one group of approximately 70 animals, continual and extensive crop damages for the communities, negative relationships between the park and the communities etc. Fortunately the Government of Rwanda funded the erection of a 120km electric fence that was handed over to AMC in 2013. Fences are a great infrastructure to reduce human/wildlife conflict but they are only as good as the management and maintenance of them. AMC has 42 members patrolling the entire 120km fence daily, maintaining it where there are problems, checking voltages and reporting any illegal sightings if any. Apart from maintenance the key success to the fence is ensuring electric power is maintained in the fence 24hrs a day. To ensure a high voltage level it is paramount to have good solar batteries and to ensure that there is no vegetation along the fence dissipating the power.

There are presently 9 fence energiser stations and at each station there are 5 batteries for the fence and station. This would result in the replacement of 45 batteries along the fence.

Due to the double rainy season in Rwanda there is a need to spray the fence on 2 occasions throughout the year to ensure there is no vegetation on the electrics.

Planning (January-February 2018)

If the funding is approved then the following applies;

Get quotes for batteries and chemicals with preference on organic chemicals.

Procurement (March 2018)

Procurement of the batteries and chemicals to coincide with the rainy season of March -May

Replace batteries (April-June 2018)

Spray (April-May and November-December 2018)

Evaluation and Reporting (June 2018 onwards)

Monthly report on fence voltages and number of days functioning continually.

KM's sprayed

Final report on project (December 2018)

Implementation report and financial accounting of the project so as to close the funding.

Linked with collaring report

By ensuring there is good battery power to push power throughout the night is paramount and to ensure there is no loss of power due to vegetation interference is also paramount to

ensuring there are no breakages of the fence by elephants. Good reliable and constant power will ensure the elephants stay in the park thus not causing any potential human/wildlife conflict.

Should include anticipated benefits (including benefits to the conservation and management of elephant populations and communities) and outputs from the project, and how the project will be monitored and evaluated.

6.0 Project Timeline – outline the timeline for proposed activities within this project. You may find it helpful to relate the timeline to the Phases identified in Section 5.0 above.

Elephant collaring

Planning and quotations will be from January-March 2018
Purchase of all relevant equipment from April-May 2018
Collaring in the months of August and September 2018
Final report on implementation of the project in December 2018

Integrity of the fence (chemical weeding and replacement of all solar batteries)

Planning and quotations will be from January-February 2018
Purchase of all relevant equipment from March 2018
Replacement of batteries over 3 months from April-June 2018
Spraying in April-May and November-December 2018
Final report on implementation of the project in December 2018

BUDGET

7.0 Has this project received or been pledged any other sources of funding (external)? Give all relevant details (for example, amount, source of funds, timetable, any restrictions):

As per budget

7.1 Please provide a detailed proposed budget for this project (in US\$). You may find it helpful to relate expenditure to the Phases you have set out in Section 5.0

FULL PROPOSAL BUDGET			
	Quantity/Days/	Cost/Unit	Expected source of funds and amounts

BUDGET LINE	Participants		AEF	PROPONENT (GOVT.)	Akagera Management Company
EQUIPMENTS/ GEAR/ SUPPLIES					
2 x Yamaha AG200's		\$7,500	\$15,000		
1 x desktop HP		\$1,000	\$1,000		
6 x Elephant Satellite collars		\$2,500	\$15,000		
2 x VHF receivers		\$750	\$1,500		
9 x 5 solar batteries		\$375	\$16,875		
Spray for vegetation. 400litres		\$9.5	\$3,800		
AKAGERA MANAGEMENT COMPANY COSTS					
Accommodation for vet		\$200			\$1,400
Akagera staff to support collaring (12 people x 7 days x \$5)		\$5			\$420
Use of 2 park vehicle (7 days @ \$150per day x 2)		\$150			\$2,100
Flights for vet		\$850			\$850
Purchase of one Motorbike to ensure south central and north have a motorbike		\$7,500			\$7,500
Labour spraying the fence (10 people for 30 days x 2 @\$3 a day)		\$3			\$1,800
Fence attendants monitoring the fence (\$200 per month x 35people x 12)					\$84,000
Rations fence attendants (\$1.8 a day per person)					\$19,656
Technician replacing batteries (40 days @ \$80)					\$3,200
VET COSTS AND HELICOPTER HOURS FOR DARTING OF ELEPHANTS					
Vet cost per day (\$500) @ 7 days		\$500	\$3,500		
10hrs helicopter flying @ \$1,650		\$1,650	\$16,500		
TOTAL			\$72,675		\$120,926

Any other budget lines:

7.2 Please specify the proponents contribution towards the project

\$120,926 but this is not exhaustive as there are many factors to ensuring the fence is fully functional.

Please submit the completed proposal, either by:

Email:

Fax:

You should receive acknowledgement of receipt of your proposal within 14 days. If you do not receive such an acknowledgement, please telephone:

Further details on any of the above details may be requested by the Steering Committee of the African Elephant Fund.