



Small Grants – Project Completion and Impact Report

Instructions to grantees: please complete all fields, and respond to all questions listed below.

Organization Legal Name	<i>National Museums of Kenya</i>
Project Title	Promoting the conservation and inclusion in conservation efforts of dragonflies in Mt Kenya and Aberdare regions
Grant Number	S18-501-KEN NMK / CEPF-109127
Date of Report	25 Oct 2019

CEPF Hotspot: Eastern Afromontane Biodiversity Hotspot

Strategic Direction: 2: Improve the protection and management of the KBA network

Grant Amount: 31,158

Project Dates: 01/08/2018 -15/02/2020

PART I: Overview

1. Implementation Partners for this Project (*list each partner and explain how they were involved in the project*)

- i) Mt Kenya Biodiversity Conservation Group - Awareness creation within community and community entry point
- ii) Kijabe Environment Volunteers (Kenvo) - Awareness creation within community and community entry point
- iii) Nature Kenya- Facilitation of easy access to the communities round the forest and advocacy work
- iv) Kenya Wildlife Service (KWS) - Facilitate access to protected area and provision of security as well as drafting and implementation of a species action plan
- v) Kenya Forest Service (KFS) - Facilitate access to protected area and provision of security as well as drafting and implementation of a species action plan
- vi) Kabarú Community Forest Association - Provision of tree seedlings and actual planting
- Vii) Maragima Primary School- Pupils and teachers participated in tree planting
- vii) Local administration - mobilized community in areas to be re-afforested
- viii) The Biodiversity Development Institute (BDI) based in Cape town, South Africa

2. Summarize the overall results/impact of your project

The project has developed the first ever Species Action Plan covering dragonflies in Kenya. This will be instrumental in advising the inclusion of insects as for the very first time in the management of the two KBAS that were studied. The updated distribution information for the three threatened dragonfly species will be used to update their IUCN data. There is now increased awareness of dragonflies and insects in general among the communities in the two KBAs. The restoration of one of the key sites for a critically endangered damselfly (Montane or Kenya Jewel) will have a major impact to its survival in the future. Strong networks and collaborations were established in the course of project implementation which will keep conservation works alive beyond project's life.

3. Briefly describe actual progress towards each planned long-term and short-term impact (as stated in the approved proposal)

List each long-term impact from your proposal

i)

a. Planned Long-term Impacts - 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
The conservation of dragonflies of Mt. Kenya and Aberdare forests	A multiple species Action Plan has been developed covering 3 IUCN listed dragonflies species occurring in the two forests. The Species action plan developed in collaboration with key species protection agencies namely Kenya Wildlife Service, Kenya Forest Service and Nature Kenya has been adopted by the same stakeholders and will be used for the very first time to introduce insects into forthcoming Management Plans for both Aberdares and Mt. Kenya. Specific actions highlighted in the Species action plan include habitat conservation and restoration. This will end up conserving not only the threatened species but also the other dragonfly species. It also recommends introduction and reintroduction of the threatened species within their natural ranges

b. Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
1. Community members will practise dragonfly friendly activities along the rivers and streams as a result of our project	One major dragonfly unfriendly practice was use of detergents in the rivers. Before the projects, more than 70% of those doing laundry did it right inside the rivers. By close of project about 40 % practiced this at least in the few sites that we identified for monitoring. We used photos as evidence of this change.
2. Our Species Action Plans for the red-listed species will be incorporated into the management plans of the two KBAS leading to a better management of 365,539 hectares of natural forest land	The Multiple Species Action Plan has been handed to both Kenya Wildlife Service and Kenya Forest service who are the custodians of wildlife and forests in Kenya respectively. In their own words, It will be heavily borrowed from while reviewing the

<p>by Kenya Wildlife Service (KWS) and Kenya Forest Service (KFS). It will also assist other consumers such as Nature Kenya and various CBOs to prioritize dragonfly areas for conservation</p>	<p>management plans for both Mt Kenya and the Aberdares which is due in 2020. Nature Kenya has identified several actions within the plan for implementation with the communities. Signed commitments to using the Species Action Plans have been provided as evidence as well as photo evidences of handing over in a separate narrative report.</p>
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4. Describe the success or challenges of the project toward achieving its short-term and long-term impacts

The project had several great successes towards achieving its impacts. Awareness creation especially through the local schools and workshops was one such of successes. There was a very big appreciation of the role of insects in general in the ecosystems among the communities that we worked in after this awareness. Continued posting of dragonflies image records to virtually museums by workshop participants can only point to the success of those trainings. Habitat restoration in one of the sites (River Thegu) that has a critically endangered damselfly was another big success. The project together with local schools planted riverine native species of trees that had been recommended earlier by a project supported botanist. Probably the biggest success in our opinion was development and adoption by conservation agencies of a ten year Species Action Plan covering three red listed dragonflies. One challenge faced towards achieving our impacts pertained to reduction of detergent use in rivers. Each time we visited the sites we had to talk to different people and made us not have as much impact as we would have wanted. It however gave us important lessons on how to approach a similar issue in the future.

5. Were there any unexpected impacts (positive or negative)?

One unexpected impact of our project is communities realizing the changes that have been happening in their surroundings and how their activities have been contributing to that. We used the project time to explain how their activities have brought about the changes. Many unexpected questions such as happened to the many swarms of bees, populations of fireflies and safari ants of yester years cropped up from the communities all the time. Following the digitization of historical records at the Natural History Museum, we were able to develop the first ever Dragonflies Calendar for Kenya which moving forward will be very instrumental in advising the best time to study or watch dragonflies in Kenya. The exemplary performance of workshop participants in the DBI quiz, some with very low level of formal education was totally unexpected. I landed an invitation by Nature Kenya which is the Birdlife partner in Kenya to share my project's findings in a public lecture. The attendance and the questions asked were totally beyond our expectations. Due to the availability of good and complete data, dragonflies were identified as a taxon of choice to be used during a species red listing workshop organized by Biodiversity Assessment for Spatial Prioritization (BASPA) in Nairobi in the month of November 2019.

PART II: Project Outputs/Results

6. Outputs/results (as stated in the approved proposal/logical framework)

List each Output/Result and indicator from your logical framework, and describe what was achieved (also attach all means of verification to this report)

#	Output/Result	Indicator	What was achieved (using indicator)
1	1. Distribution maps	1. Complete geo-referenced records 2. Entry of all records into an electronic database	Complete digital data base of dragonflies (Already online on GBIF) https://www.gbif.org/dataset/b35a84e1-9584-4240-8186-c2461c4b6a06 Distribution maps now available and can be generated at request using R statistical program and by anyone anywhere as all geo-referenced data is freely available in GBIF
2	2. An up-to-date checklist of dragonflies of Mt Kenya region	1. A detailed database of dragonfly records 2. Up-to-date dragonflies checklist	Database now in place both at the museum and online An update checklist of Kenya dragonflies now available
3	3. Voucher specimens for the national repository at the museums	Number of new specimens at museum's collection from the region	The collection has expanded by 105 specimens. This growth now is being used to justify purchasing of more storage cabinets by the museum
4	4. Species Action Plans for the two red-listed dragonfly species	1. Minutes of meeting's proceedings and a report capturing the stakeholders feedback 2. Two agreed Species Action Plans	A Multi-Species Action Plan is in place covering not two species as in the proposal but three species.
5	5. Community generated Dragonfly Biotic Indices (DBI) for the 2 KBAs	Calculated Dragonfly Biotic Indices for Mt. Kenya and Aberdare rivers	Two separated communities one from each mountain successfully calculated DBIs with over 95% pass rates. The indices were calculated using examples not from the 2 KBAs as not much dragonflies were active during the workshops given their seasonality
6	6. Increased dragonflies awareness, knowledge and education	1. Records of dragonflies sightings by SSGs and submitted to the Virtual Museum hosted by Univ. of Cape Town 2. Over 80% of the workshop participants attain above 70% of the marks in the DBI workshop	Records have started appearing on the Virtual Museum based at the University of Cape town from workshop participants 95% of the workshop participants pass the DBI quiz (Marks tabulated in a workshop report) 6 Schools visited, talks and awareness posters given (1 in the Aberdares and 5 in Mt. Kenya) (Evidences also in a field report) A public lecture organized by Nature Kenya on the dragonflies of the two mountain regions was given.

		3. 6 schools visited for a dragonfly talk. Two in each SSG area	Results from the CEPF funded project were shared in the first ever citizen science conference in South Africa courtesy of a CEPF travel grant.
7	7. Enriched global databases e.g. ADDO (African dragonflies and damselflies Online) and GBIF	1. Successful identification of all specimens 2. Complete geo-locality data for all specimens	The entire dragonflies data at the museum is now online in GBIF. Here it will be available to a global audience for application in conservation works and other uses. Participants in the two DBI workshops were introduced to virtual museums. Already several records captured using mobile phones are online courtesy of work shop participants. The virtual Museum at Univ. of Cape town share data with ADDO website
8	8. CEPF Tools and Products		Completed in time and submitted

7. Please describe and submit any tools, products, or methodologies that resulted from this project or contributed to the results.

Dragonflies Biotic Index (DBI) which was taught in two community workshops was used to contribute to some results here. DBI is a simple to calculate index developed in South African but being applied in all of Africa. It is has become very instrumental in identifying critical habitats. To calculate it, one needs to generate 3 sub-indices namely; Species distribution, IUCN red list category and lastly sensitivity of each species to human impact. Summation of the sub- indices divided by the total number of dragonfly species gives the habitat DBI. Among its uses is identification of critical habitats for prioritizing, comparing habitats, monitoring same habitat over time and quantifying impacts of interventions such as removal of alien plant species in a habitat.

A simple and cheap smart phone mounted telescope lens was tested for taking images of dragonflies from several metres. This gadget proved very useful for imaging shy species and has been recommended for incorporation into data collection involving citizen scientists who in most cases have no access to expensive cameras. I had a chance to demonstrate its functioning to the participants of the conference in South Africa.

PART III: Lessons, Sustainability, Safeguards and Financing

Lessons Learned

8. Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building.

Consider lessons that would inform:

- **Project Design Process (*aspects of the project design that contributed to its success/shortcomings*)**
- The master class held for all grantees during project designs was extremely instrumental in ensuring much of our success. Before the master class, we did not

fully understand things such as Log frames, implementation plans, safeguards and how to properly report.

- **Project Implementation (*aspects of the project execution that contributed to its success/shortcomings*)**
- The lesson we learnt during project implementation and which contributed to the successes that we attained is that quarterly reporting as opposed to bi-annual or annual is very ideal. It kept everything fresh in our minds and kept reminding us of the next activities. We however experienced that quarterly funding projections were not really working for us as the next disbursement depended on reports being approved. The time in between the reporting, approvals and disbursement was too short and affected our timings of activities.
- **Describe any other lessons learned relevant to the conservation community**
- We learnt that others always know a thing that you do not. I learnt this from the valuable inputs that I got from other conservation stakeholders towards the Species Action Plan development meetings as well as from the community members.
- We also learnt that in the training of Dragonflies Biotic Index calculation, prior basic taxonomic knowledge among participants is necessary and should be taught first.
- The citizen science conference in South Africa opened me to the details of organizing data gathering by citizens and how to analyze it to make sense in conservation.
- I also learnt that travelers using means that contribute to carbon footprint should mitigate this by among other ways planting of trees. I planted trees in Africa's southernmost forest at Platbos to fulfil a condition given by CEPF for securing the travel grant.

Sustainability / Replication

9. Summarize the success or challenges in ensuring the project will be sustained or replicated, including any unplanned activities that are likely to result in increased sustainability or replicability.

Our project partners (Kenya Wildlife Service and Kenya Forest Service) have planned to enlist the help of their rangers who are always in the forests to gather dragonflies data listed as missing by IUCN such as altitudinal ranges and population sizes. They have also promised to for the very first time to have insects (dragonflies) included in their annual activities such as animal counts. The two community based organizations (CBOs) that partnered with us has each received entomological equipment from the project to mainstream insects into their activities. They both have great plans of monitoring insects including dragonflies and making education collections. The equipment will be very instrumental in their school programs. With some funding support from CEPF, administered through Fauna and Flora International, our project had an exchange visit with another CEPF project by Rwanda Wildlife Conservation Association (RWCA) working on cranes. The main visit idea was the training and calculation of Dragonflies Biotic Index to monitor the marshlands for the conservation of cranes. RWCA has now adopted the estimation of DBI annual. This will lead to replicability of our project activities beyond Kenya.

Safeguards

10. If not listed as a separate Project Component and described above, summarize the implementation of any required action related to social or environmental safeguards that your project may have triggered.

Refer to my Health and Safety report

Additional Funding

11. Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of CEPF investment

a. Total additional funding (9800US\$)

b. Type of funding

Please provide a breakdown of additional funding (counterpart funding and in-kind) by source, categorizing each contribution into one of the following categories:

Donor	Type of Funding*	Amount	Notes
Wide Wildlife Fund (WWF)	B	9800	Air-ticket and accommodation for an information sharing meeting at The Nature Conservancy in Maine USA

* Categorize the type of funding as:

- A *Project Co-Financing (other donors or your organization contribute to the direct costs of this project)*
- B *Grantee and Partner Leveraging (other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project)*
- C *Regional/Portfolio Leveraging (other donors make large investments in a region because of CEPF investment or successes related to this project)*

Additional Comments/Recommendations

12. Use this space to provide any further comments or recommendations in relation to your project or CEPF.

The project had three very important side activities that contributed to its successful implementation. They are a master class in Rwanda, a biodiversity and gender mainstreaming workshop held in Kenya by Flora and Fauna International and lastly an exchange visit with a Rwandese project funded by CEPF implemented by Flora and Fauna International. These whether by design or not, happened at the very beginning, mid and tail end of the CEPF project respectively.

PART IV: Impact at Global Level

CEPF requires that each grantee report on impact at the end of the project. The purpose of this report is to collect data that will contribute to CEPF’s portfolio and global indicators. CEPF will aggregate the data that you submit with data from other grantees, to determine the overall

impact of CEPF investment. CEPF’s aggregated results will be reported on in our annual report and other communications materials.

Ensure that the information provided pertains to the entire project, from start date to project end date.

Contribution to Global Indicators

Please report on all Global Indicators (sections 13 to 23 below) that pertain to your project.

13. Key Biodiversity Area Management

Number of hectares of Key Biodiversity Areas (KBA) with improved management

Please report on the number of hectares in KBAs with improved management, as a result of CEPF investment. Examples of improved management include, but are not restricted to: increased patrolling, reduced intensity of snaring, invasive species eradication, reduced incidence of fire, and introduction of sustainable agricultural/fisheries practices. Do not record the entire area covered by the project - only record the number of hectares that have improved management.

If you have recorded part or all of a KBA as newly protected for the indicator entitled “protected areas” (section 17 below), and you have also improved its management, you should record the relevant number of hectares for both this indicator and the “protected areas” indicator.

Name of KBA	# of Hectares with strengthened management *	Is the KBA Not protected, Partially protected or Fully protected? Please select one: NP/PP/FP
Mt Kenya	10	PP

** Do not count the same hectares more than once. For example, if 500 hectares were improved due to implementation of a fire management regime in the first year, and 200 of these same 500 hectares were improved due to invasive species removal in the second year, the total number of hectares with improved management would be 500.*

14. Protected Areas

14a. Number of hectares of protected areas created and/or expanded

Report on the number of hectares of protected areas that have been created or expanded as a result of CEPF investment.

Name of PA*	Country(s)	# of Hectares	Year of legal declaration or expansion	Longitude**	Latitude**

** If possible please provide a shape file of the protected area to CEPF.*

*** Indicate the latitude and longitude of the center of the site, to the extent possible, or send a map or shapefile to CEPF. Give geographic coordinates in decimal degrees; latitudes in the Southern Hemisphere and longitudes in the Western Hemisphere should be denoted with a minus sign (example: Latitude 38.123456 Longitude: -77.123456).*

14b. Protected area management

If you have been requested to submit a Management Effectiveness Tracking Tool (METT), please follow the instructions below. If you have not been requested to submit a METT, please go directly to section 16.

Should you want to know more about the monitoring of protected area management effectiveness and the tracking tool, please click [here](#).

Download the METT template which can be found on [this page](#) and then work with the protected area authorities to fill it out. Please go to the Protected Planet website [here](#) and search for your protected area in their database to record its associated WDPA ID. Then please fill in the following table:

WDPA ID	PA Official Name	Date of METT*	METT Total Score

** Please indicate when the METT was filled by the authorities of the park or provide a best estimate if the exact date is unknown. And please only provide METTs less than 12 months old.*

Please do not forget to submit the completed METT together with this report.

15. Production landscape

Please report on the number of hectares of production landscapes with strengthened management of biodiversity, as a result of CEPF investment. A production landscape is defined as a landscape where agriculture, forestry or natural product exploitation occurs. Production landscapes may include KBAs, and therefore hectares counted under the indicator entitled “KBA Management” may also be counted here. Examples of interventions include: best practices and guidelines implemented, incentive schemes introduced, sites/products certified and sustainable harvesting regulations introduced.

Number of hectares of production landscapes with strengthened management of biodiversity.

Name of Production Landscape*	# of Hectares**	Latitude***	Longitude***	Description of Intervention
River Thegu	10	S 002048.45	E0370253.39	Replanting of trees in a 10 hectares riverine area to restore

				canopies necessary for the survival of a critically endangered damselfly

** If the production landscape does not have a name, provide a brief descriptive name for the landscape.*

***Do not count the same hectares more than once. For example, if 500 hectares were strengthened due to certification in the first year, and 200 of these same 500 hectares were strengthened due to new harvesting regulations in the second year, the total number of hectares strengthened to date would be 500.*

**** Indicate the latitude and longitude of the center of the site, to the extent possible, or send a map or shapefile to CEPF. Give geographic coordinates in decimal degrees; latitudes in the Southern Hemisphere and longitudes in the Western Hemisphere should be denoted with a minus sign (example: Latitude 38.123456 Longitude: -77.123456).*

17. Beneficiaries

CEPF wants to record two types of benefits that are likely to be received by individuals: structured training and increased income. Please report on the number of men and women that have benefited from structured training (such as financial management, beekeeping, horticulture) and/or increased income (such as from tourism, agriculture, medicinal plant harvest/production, fisheries, handicraft production) as a result of CEPF investment. Please provide results since the start of your project to project completion.

17a. Number of men and women receiving structured training.

# of men receiving structured training *	# of women receiving structured training *
9	13

17b. Number of men and women receiving cash benefits.

# of men receiving cash benefits*	# of women receiving cash benefits*
4 Dug seedlings holes and watered before rains	

18. Benefits to Communities

CEPF wants to record the benefits received by communities, which can differ to those received by individuals because the benefits are available to a group. CEPF also wants to record, to the extent possible, the number of people within each community who are benefiting. Please report on the characteristics of the communities, the type of benefits that have been received during the project, and the number of men/boys and women/girls from these communities that have benefited, as a result of CEPF investment. If exact numbers are not known, please provide an estimate.

18a. Please provide information for all communities that have benefited from project start to project completion.

Name of Community	Community Characteristics (mark with x)							Type of Benefit (mark with x)							# of Beneficiaries			
	Subsistence economy	Small landowners	Indigenous/ ethnic peoples	Pastoralists / nomadic peoples	Recent migrants	Urban communities	Other*	Increased access to clean water	Increased food security	Increased access to energy	Increased access to public services (e.g. health care, education)	Increased resilience to climate change	Improved land tenure	Improved recognition of traditional knowledge	Improved representation and decision-making in governance forums/structures	Improved access to ecosystem services	# of men and boys benefiting	# of women and girls benefiting

*If you marked "Other" to describe the community characteristic, please explain:

19b. For each law, policy or regulation listed above, please provide the requested information in accordance with its assigned number.

No.	Country(s)	Date enacted/ amended MM/DD/YYYY	Expected impact	Action that you performed to achieve this change
1				
2				
3				

20. Sustainable Financing Mechanism

Sustainable financing mechanisms generate financial resources for the long-term (generally five or more years). Examples of sustainable financial mechanisms include conservation trust funds, debt-for-nature swaps, payment for ecosystem services (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation.

All CEPF grantees (or sub-grantees) with project activities that pertain to the creation and/or the implementation of a sustainable financing mechanism are requested to provide information on the mechanism and the funds it delivered to conservation projects during the project timeframe, unless another grantee involved with the same mechanism has already been or is expected to be tasked with this.

CEPF requires that all sustainable financing mechanism projects to provide the necessary information at their completion.

20a. Details about the mechanism

Fill in this table for as many mechanisms you worked on during your project implementation as needed.

NO.	Name of financing mechanism	Purpose of the mechanism*	Date of Establishment**	Description***	Countries
1					
2					
3					

*Please provide a succinct description of the mission of the mechanism.

**Please indicate when the sustainable financing mechanism was officially created. If you do not know the exact date, provide a best estimate.

***Description, such as trust fund, endowment, PES scheme, incentive scheme, etc.

20b. Performance of the mechanism

For each Financing Mechanism listed previously, please provide the requested information in accordance with its assigned number.

NO.	Project intervention*	\$ Amount disbursed to conservation projects**	Period under Review (MM/YYYY -MM/YYYY)***
1			
2			
3			

*List whether the CEPF grant has helped to create a new mechanism (Created a mechanism) or helped to support an existing mechanism (Supported an existing mechanism) or helped to create and then support a new mechanism (Created and supported a new mechanism).

**Please only indicate the USD amount disbursed to conservation projects during the period of implementation of your project and using, when needed, the exchange rate on the day of your report.

***Please indicate the period of implementation of your project or the period considered for the amount you indicated.

Please do not forget to submit any relevant document which could provide justification for the amount you stated above.

21. Biodiversity-friendly Practices

Please describe any biodiversity-friendly practices that companies have adopted as a result of CEPF investment. A company is defined as a legal entity made up of an association of people, be they natural, legal, or a mixture of both, for carrying on a commercial or industrial enterprise. While companies take various forms, for the purposes of CEPF, a company is defined as a for-profit business entity. A biodiversity-friendly practice is one that conserves or uses biodiversity sustainably.

Number of companies that adopt biodiversity-friendly practices

No.	Name of company	Description of biodiversity-friendly practice adopted during the project
1		
2		
...		

22. Networks & Partnerships

Please report on any new networks or partnerships between civil society groups and across to other sectors that you have established or strengthened as a result of CEPF investment. Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable even if they do not have a Memorandum of Understanding or other type of validation. Examples of networks/partnerships include: an alliance of fisherfolk to promote sustainable fisheries practices, a network of environmental journalists, a partnership between one or more NGOs with one or more private sector partners to improve biodiversity management on private lands, a working group focusing on reptile conservation. Please do not use this tab to list the partners in your project, unless some or all of them are part of such a network / partnership described above.

Number of networks and/or partnerships created and/or strengthened

No.	Name of Network	Name of Partnership	Year established	Did your project establish this Network/ Partnership? Y/N	Country(s) covered	Purpose

23. Gender

If you have been requested to submit a Gender Tracking Tool (GTT), please follow the instructions provided in the Excel GTT template. If you have not been requested to submit a GTT, please go directly to Part V.

Should you want to know more about CEPF Gender Policy, please click [here](#).

Download the GTT template which can be found on [this page](#) and then work with your team to fill it out. Please do not forget to submit the completed GTT together with this report.

Refer to my Gender Tracking Tool Report

Part V. Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

Please include your full contact details below:

- 16. Name: Laban Njoroge**
- 17. Organization: National Museums of Kenya**
- 18. Mailing address: P.O. Box 40658-00100 Nairobi, Kenya**
- 19. Telephone number: +254722257790**
- 20. E-mail address: Lnjoroge@museums.or.ke**