CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	Nature Kenya (EANHS)
Project Title:	Research to upgrade the biological importance and biological priority status of Mukurwe-ini and Kianyaga Valleys KBAs
Date of Report:	4th August 2017
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CEPF Region:
Kenya: Africa, Eastern Afro-montane Hotspot

Strategic Direction:
In line with CEPF Ecosystem Profile **Strategic Direction 2, Investment Priority 2.3.**, the biodiversity surveys carried out in this project has provided important data to support upgrading biological importance of Mukurwe-ini and Kianyaga Valleys KBAs from BP3 to BP2.

Grant Amount: USD 20,000

Project Dates: 1st July 2016 to 30th June 2017

Implementation Partners for this Project (please explain the level of involvement for each partner):

1. Karatina University and Mount Kenya University provided the qualified masters level students. Through the academic structure of the universities, the supervisors guided the students to design post graduate projects.
2. National Museums of Kenya provided biodiversity data repository with taxa specialists whom co-supervised the university master students. The specialists also provided mentorship to the students on best field research practices and ethics
3. Mukurwe-ini Environment Volunteers (MEVO) is Nature Kenya's Site Support Group based in Mukurwe-ini IBA. The SSG offered logistical support to the students by allocating field assistants whom would work closely with the students. This was aimed to expand the knowledge base and skills transfer through citizen science to the local community.

Conservation Impacts

Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.

This project has supported biodiversity surveys on 5 different taxa (birds, reptile and amphibians, plants, small mammal and macro invertebrates) in 2 IBAs, Mukurweini and Kianyaga Valleys IBA. The results from the surveys listed 3 species with Endangered

conservation status (*Myrianthus holstii, Baphia longipedicellata subsp. Keniensis, Phrynobatrachus irangi*) and 3 species with Vulnerable conservation status (*Turdoides hindei , Phrynobatrachus kinangopensis, Dorstenia thikaensis*). From these results, data supports and qualifies upgrading of Mukurweini and Kianyaga valleys IBA from BP3 to BP2 category of biological importance.

As a result, this project has supported CEPF's five-year investment in the region which aims to contribute to: 'Upgrade' the "biological importance/biological priority status" of already identified KBAs.

Please summarize the overall results/impact of your project against the expected results detailed in the approved proposal.

Four post graduate university students were indentified to carry out field surveys on four biodiversity taxa; small mammals, herpetofauna (reptiles and amphibians), ornithology (birds) and macro-invertebrates. Botanical surveys were carried out by the plant committee of Nature Kenya which is affiliated with the National Museums of Kenya.

The field surveys a total of **27** herpetofauna species, **330** plant species, **27** bird species, **5** small mammal species and **43** macro invertebrates were identified and observed.
Species of conservation importance were (Table 1);

1. 2 herptofauna species; *Phrynobatrachus kinangopensis* (VU) and *Phrynobatrachus irangi* (EN),
2. 1 bird species; *Turdoides hinde* (VU),
3. 3 plant species; *Myrianthus holstii* (EN), *Baphia longipedicellata subsp. Keniensis* (EN) and *Dorstenia thikaensis* (VU)

Table 1: *Summary of key species indentified in Mukurweini and Kianyaga Valleys IBAs, their conservation status, population range and data source*

Site	Broad Taxa Category	No. of Species Recorded	No. Species of Conservation Concern	Name of Species	Conservation Status	Pop. Range	Data Source
Mukurweini IBA	Aves	32	1	*Turdoides hindei*	VU	Kenya Endemic	Observed & Literature
Mukurweini IBA	Plants	315	1	*Myrianthus holstii*	EN	Kenya Endemic	Observed & Literature
Kianyaga Valleys IBA	Plants	308	3	*Myrianthus holstii*	EN	Kenya Endemic	Observed & Literature
				Baphia longipedicellata subsp. keniensis	EN	Kenya Endemic	Observed & Literature
				Dorstenia thikaensis	VU	Kenya Endemic	Observed & Literature
Kianyaga Valleys IBA	Amphibia	22	2	*Phrynobatrachus irangi*	EN	Kenya Endemic	Literature
				Phrynobatrachus kinangopensis	VU	Kenya Endemic	Observed & Literature

Before these surveys were carried out, Mukurweini and Kianyaga valleys IBAs were within the KBA category of Biological Importance BP3. From the results of this project, additional biodiversity data supports to qualify upgrading the Biological Importance of these IBAs from BP3 to BP2 because 2 endangered plant species were observed during the field surveys. One endangered amphibian species *Phrynobatrachus irangi*, which is cited in literature to occur within Kianyaga Valleys IBA, was not observed supporting need for further field surveys in the IBA.

Biodiversity information generated and documented from this project will contribute useful data to support continued advocacy on safeguarding and protecting these two KBAs. The results from these surveys will be included while reviewing Environmental Impact Assessments for development projects which are planned to be implemented and provide data reference for assessing land use changes within these KBAs.

Please provide the following information where relevant:

Hectares Protected: **N/A**
Species Conserved: **N/A**
Corridors Created: **N/A**

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.

In the short term, this project has enabled 4 university students to bridge the difficult gap of financing field projects which contribute to the completion of their Masters degree as it provides hand on experience field survey techniques. The project has achieved success by contributing important biodiversity data from two KBAs which is important for conservation decision making.

In the long term, Karatina University has committed towards encouraging students to use these Mukurweini and Kianyaga valleys IBAs as field laboratory which would generate further biodiversity information to improve the conservation profile of these sites. Nature Kenya has made financial commitment to supporting the Nature Kenya committees to carry out short field activities annually in Kenya's IBAs. This support will enable follow up surveys and conservation programs within these IBAs. Finally, inclusion of data contributed from this project to the national policy framework of Wildlife Conservation and Management Strategy will support activities to safeguard the conservation status of these sites.

Were there any unexpected impacts (positive or negative)?

From macro-invertebrates survey, possibility of registering new Genus and Species from samples collected has been noted. This is because very little information is available on macro-invertebrates in Kenya. Continued identification of samples is ongoing in collaboration with the National Museums of Kenya with reference in laboratory of Zoology and Entomology in Rhodes University, Grahamstone, South Africa. Positive impacts were registered whereby one student leveraged on this work to receive a

scholarship which would enable him to further field work within Mukurwe-ini and Kianyaga valleys IBAs. Drought experienced in the country during the survey period offered an unexpected impact mainly on weather dependent taxa like small mammals. Therefore results from small mammals may be a bit skewed and not good indication of presence or absence of certain species.

Lessons Learned

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 projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

Project Design Process: (aspects of the project design that contributed to its success/shortcomings)

The project was well designed by involvement of expertise from Karatina University and National Museums of Kenya present offered a win-win situation. The universities were able to build capacity of their students and follow up towards achieving the objectives of each field study. Involvement of local community members from two sites provided useful logistical support to the field teams while they gained new field skills and knowledge on other important biodiversity present in their locations. Nature Kenya acquired useful data to contribute toward qualifying upgrading of Biological Priority of these KBAs from BP3 to BP2.

Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)

The project implementation involved using university students to carry out field surveys. This idea was well conceived and workable. However, shortcoming which arose was that the university calendars did not coincide appropriately with the project implementation phase. Therefore time was lost in the initial phase of the project. So, for such a project to be implemented, consideration of timelines which targeted partners can accommodate should be taken in mind.

Other lessons learned relevant to conservation community:

Improving knowledge on biodiversity is a critical tool for present and future decision making. Building capacity of local communities through citizen science can play a critical role in raising conservation interest at grass-root level. This approach ensures proper environmental safeguards are put in place works best.

ADDITIONAL FUNDING

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Notes
Netherland	A	U$D 40,000	Joshua Mwendwa a

Fellowship Program Scholarship			masters student from Karatina University, received additional funding as a result of the support offered by CEPF through Nature Kenya for Joint Master's Programme in Limnology and Wetland Management between BOKU University in Austria, Egerton University Kenya and UNESCO Delft in The Netherlands
National Museum of Kenya	A	U$D 5,000	Staff from the National Museums of Kenya (Mr. Laban Njoroge, Dr. Malonza, Mr. Joash N.) provided expert guidance to the students. Dr. Malombe and Mr. Matheka were instrumental in botanical monitoring and reporting. These 5 NMK staff salaries were paid by NMK during the period of this project.

Additional funding should be reported using the following categories:

A *Project co-financing (Other donors contribute to the direct costs of this CEPF 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 project.)*

C *Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

Sustainability/Replicability

Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.

The surveys have contributed additional biodiversity information from Mukurwe-ini and Kianyaga valleys IBAs which will be in repository for reference within the National Museums of Kenya. The field methods applied are replicable in future to assess impacts

of changes in population status of the identified species. Results of this survey will be contributing to the larger program of the bio-monitoring of the Upper Tana supported by the TNC through the National Museums of Kenya. This builds to synergize activities that complement conservation institutions programs in the region. As a result of this collaboration, it is expected that rehabilitation of private degraded lands to reduce soil erosion and increase tree cover.

Summarize any unplanned sustainability or replicability achieved.
N/A

Safeguard Policy Assessment

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

The project was implemented in collaboration with National Museums of Kenya. As a requirement, all the students worked closely with research experts from the National Museums of Kenya who are authorized under the institution research permit therefore, the need for applying for individual research permit was avoided.

To ensure that environment, researcher health and safety were safeguarded, Nature Kenya implemented a health and safety policy. This policy was introduced to the students who were involved in the project. It was compulsory for all the students to have protective gear when handling animals. The Health & Safety Policy was implemented by all the involved persons. During the project implementation, periodic assessment of compliance to the policy was carried out by Nature Kenya project manager. As a result there were no incidents reported during the project period

Additional Comments/Recommendations

This support offered by CEPF, has offered opportunities for Karatina University, National Museums of Kenya and Nature Kenya to collaborate to enhance knowledge on biodiversity from Mukurwe-ini and Kianyaga valleys KBAs. Lessons learned from this project will be replicated to qualify and/or upgrade the Biological Priority of IBAs in Kenya.

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:

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*****please complete the tables on the following pages*****

Performance Tracking Report Addendum

Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved for project from inception of CEPF support to date	Describe the principal results achieved during project period (Attach annexes if necessary)
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	No		Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	No		Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	No		
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	No		
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1below.	No		

If you answered yes to question 5, please complete the following table.

Table 1. Socioeconomic Benefits to Target Communities

Please complete this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community in column one. In the subsequent columns under Community Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the totals of the Xs for each column.

Name of Community	Community Characteristics								Nature of Socioeconomic Benefit													
									Increased Income due to:													
	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic peoples	Recent migrants	Urban communities	Communities falling below the poverty rate	Other	Adoption of sustainable natural resources management practices	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security due to the adoption of sustainable fishing, hunting, or agricultural practices	More secure access to water resources	Improved tenure in land or other natural resource due to titling, reduction of colonization, etc.	Reduced risk of natural disasters (fires, landslides, flooding, etc)	More secure sources of energy	Increased access to public services, such as education, health, or credit	Improved use of traditional knowledge for environmental management	More participatory decision-making due to strengthened civil society and governance.	Other
Total																						

If you marked "Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit: