



## Small Grants – Project Completion and Impact Report

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

<b>Organization Legal Name</b>	Missouri Botanical Garden
<b>Project Title</b>	Mount Hanang Biodiversity Survey and Conservation Priority Assessment
<b>Grant Number</b>	SG72652
<b>Date of Report</b>	26 May 2019

**CEPF Hotspot:** Eastern Afromontane hotspot

**Strategic Direction:** Eastern Afromontane Ecosystem Profile Strategic Direction 2: Improve the protection and management of the KBA network throughout the hotspot.

**Grant Amount:** \$14,758

**Project Dates:** 1 July 2016-31 October 2018

### PART I: Overview

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

The Tanzania Forest Services Agency (TFS) issued permits for biodiversity survey work in Mt. Hanang Nature Forest Reserve, provided oversight and coordination, and is the recipient of all project results, which will be incorporated into a revised management plan for the Reserve and used to manage the forest resources for conservation more effectively based on this information.

The UNEP-World Conservation Monitoring Centre (UNEP-WCMC) produced maps of forest loss and gain in the Reserve and provided consultation and help with preparation of project deliverables and reports.

The Tanzania Botanical Research and Conservation Programme (TBRCP) contracted to conduct the plant survey and fill out the Management Effectiveness Tracking Tool form.

WildThings Ecology contracted to conduct the zoological survey.

#### **2. Summarize the overall results/impact of your project**

The project has contributed to the implementation of Strategic Direction 2 by providing baseline biodiversity data and information on management effectiveness of the existing Nature Reserve

and to the implementation of Investment Priority 2.1 by providing information needed to update the existing management plan for the Reserve and implement it effectively.

**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*

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

Impact Description	Impact Summary
Long-term impact 1: <b>Upgrade of Hanang Forest Reserve to Nature Reserve status</b>	This upgrade occurred under the Forest (Declaration of Mount Hanang Nature Forest Reserve) Order, 2016 (Government Notice No. 186) on 3 June 2016, after funding for the project was approved but just before its start date.
Long-term impact 2: <b>Increased management effectiveness of new Nature Reserve</b>	Will result from creation and adoption of revised management plan, now in progress, with the current METT score of 59% as a baseline against which to measure increased management effectiveness. Progress in management effectiveness will also result from the continued management of the site as a Nature Reserve with the plan to encourage further tourism at the site. Investment has already been provided by UNDP GEF for a new headquarters, ranger posts, and entrance location to the Reserve. As the Reserve is located fairly close to Arusha in a tourist region and the road has been upgraded, more tourists can be expected in the coming years. More Tanzanians can also be expected to come and climb the mountain as well.

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

Impact Description	Impact Summary
Short-term impact 1: <b>The biodiversity of the Hanang ecosystem's plants and vertebrate animals is well understood and species of high conservation priority are identified.</b>	We assessed the plant and vertebrate animal biodiversity of the Reserve through literature review, museum and database searches, and field surveys involving transect observations, plant specimen collection, and direct observation and camera trap observations of animals. Species of high conservation priority were identified in terms of IUCN Red List status, listing on CITES appendices, and local or regional endemism. See Project Components and Products/Deliverables #1 below for quantitative measurements.
Short-term impact 2: <b>Ecosystem trends, threats to biodiversity and habitats, and current management effectiveness of the Reserve are understood.</b>	We assessed ecosystem trends by means of maps showing forest loss and gain for the period 2000-2017 using remote sensed (Landsat) forest cover data at 30 m resolution derived from the Global Forest Watch portal. Direct observation during field surveys and interviews with local residents and Reserve personnel provided additional information on ecosystem trends and were the basis for the assessment of threats to biodiversity and habitats. The current management effectiveness of the Reserve was assessed by filling

	the Management Effectiveness Tracking Tool form in collaboration with Julius M. Mkumbo, Conservator of the Nature Reserve. See Project Components and Products/Deliverables #2 below for quantitative measurements.
Short-term impact 3: <b>Biodiversity data and information on trends, threats, and management effectiveness are incorporated into new management plan.</b>	All data and information have been delivered to TFS and consultation about their incorporation into an updated version of the current management plan (adopted November 2016) is in progress. The Nature Reserve management will be able to use the results to assist in the day-to-day management of the Reserve and also to help substantially develop the Reserve into the future.

**4. Describe the success or challenges of the project toward achieving its short-term and long-term impacts**

The project was successful in describing and enumerating the biodiversity of the Hanang ecosystem's plants and vertebrate animals, with previously unrecorded species of high conservation priority providing the basis for confirming and upgrading its previously recognized KBA status. Ecosystem trends, threats, and current management effectiveness are now well understood and will provide the basis for improved management planning. Challenges in obtaining permits and logistical planning as well as turnover in TFS personnel delayed completion of the project.

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

No

**PART II: Project Components and Products/Deliverables**

**6. Components (as stated in the approved proposal)**

*List each component and product/deliverable from your proposal*

**6. Describe the results for each deliverable:**

#	Description	Results for Output
1	<b>Checklists and summary tables of key taxonomic groups with publication of results</b>	A checklist of 248 species of vascular plants and a summary table of 15 plant taxa (species, subspecies, varieties) of high conservation value was delivered to TFS in December 2018. A checklist of 33 vertebrate animal species and a summary table of 14 animal species (8 vertebrates and 6 insects) of high conservation value was delivered to TFS in January 2019. Publication of results in the <i>Journal of East African Natural History</i> is expected in early 2020, while publication in <i>The Arc Journal</i> is still pending and is uncertain as to date due to changes in its personnel.
2	<b>Maps, overview of threats, Management</b>	A map of the Reserve showing forest loss for the period 2000-2017 and forest gain for the period 2000-2012 was delivered to TFS in December 2018, showing concentrated areas of loss in all but the northern part of the Reserve and only sporadic areas of forest gain. The overview of

	<b>Effectiveness Tracking Tool</b>	threats was delivered to TFS in January 2019, showing logging to be the dominant threat to the Reserve, mostly in the past in the wetter eastern portion of the Reserve but ongoing in parts of the south, center, and west. Encroachment by farms, cattle grazing, and pole cutting for building materials are locally active threats in parts of the eastern side. The completed Management Effectiveness Tracking Tool form was delivered to TFS in December 2018, showing an overall effectiveness score of 59% and pointing out deficiencies in resource inventory information, protection systems, resource management, staff numbers and training, budget security, equipment, planning for land and water use, cooperation with adjacent land and water users, input of indigenous people to management decisions, economic benefit to local communities, and contribution of commercial tourism operators and fees to protected area management.
3	<b>Revised management plan</b>	Consultation is in progress among TFS, MBG, and UNEP-WCMC. Results have been provided to TFS in a form that can be used to update the current management plan by early 2020. As the Nature Reserve Conservator was directly involved in the project, he can also use the results for reserve management.

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

The project applied standard, existing tools and methodologies to produce the products described in this report.

**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*)
- Project Implementation (*aspects of the project execution that contributed to its success/shortcomings*)
- Describe any other lessons learned relevant to the conservation community

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

Excessive dependence on consultants for delivery of project results and accounting for field expenses created confusion and breakdown in communications. Project leaders should directly supervise or closely monitor consultants' work to assure timely production and standard accounting practices, as now noted in MBG management practices.

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

Failure to involve TFS in the permitting process led to a very slow start to project fieldwork. Implementation partners should be engaged from the beginning of the process to avoid such problems.

**3. Other lessons learned relevant to conservation community:**

**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.**

At the request of TFS, ten government foresters from the Hanang, Babati, and Mbulu District TFS offices were trained in biodiversity survey techniques to provide them with skills needed to continue biodiversity survey and monitoring both at this site and in other high-value biodiversity sites nationwide.

**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.**

We obtained the required research clearance from the Tanzania Commission for Science and Technology and a permit to work in the Reserve from the Tanzania Forest Services Agency. We produced and implemented a health and safety plan. No live animals were handled during the project.

**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 (US\$) \$11,893**

**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
MBG	A	\$11,893	Project Director and support staff compensation not covered by CEPF
TFS	A	?	Salary and expenses for 5 foresters during 7 days' training

\* 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 received two no-cost extensions, in June 2017 and January 2018. As a result of financial audit of expenses reported by contractor/implementation partner TBRCF, project expenditures were terminated in May 2018 and the project was completed in October 2018.

**PART IV: Impact at Portfolio and 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 Portfolio Indicators**

**13. If CEPF assigned one or more Portfolio Indicators to your project during the full proposal preparation phase, please list these below and report on the project’s contribution(s) to them.**

Indicator	Narrative

**Contribution to Global Indicators**

**Please report on all Global Indicators (sections 16 to 23 below) that pertain to your project.**

#### 14. 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

\* 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.

#### 15. Protected Areas

##### 15a. 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).

##### 15b. 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
555624098	Mt. Hanang Nature Forest Reserve	26 May 2018	60 (59%)

*\* 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.

## 16. 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

*\* 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 *
5	

*\*Please do not count the same person more than once. For example, if 5 men received structured training in beekeeping, and 3 of these also received structured training in project management, the total number of men who benefited from structured training should be 5.*

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

# of men receiving cash benefits*	# of women receiving cash benefits*

*\*Please do not count the same person more than once. For example, if 5 men received cash benefits due to tourism, and 3 of these also received cash benefits from increased income due to handicrafts, the total number of men who received cash benefits should be 5.*

### 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
1						

2						
...						

**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.

**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](http://www.cepf.net), and publicized in our newsletter and other communications.

Please include your full contact details below:

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