Final Evaluation Report

Your Details	
Full Name	David Wechuli
Project Title	Sustainable Ecotourism and Conservation of Threatened Harrison's Giant Mastiff Bat at Mt Suswa Conservancy, Kenya
Application ID	34674-2
Date of this Report	20th September 2022

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Document major threats that the Harrison's Giant Mastiff Bat and their roosting caves face.				I successfully managed to identify and document human activities near and within the conservancy such as the proximity of human settlement to natural habitats. Charcoal burning is major activity for residents to earn a living, as several dozen sacks are supplied to the expanding Suswa town. I counted 18 charcoal kilns, especially in the eastern part of the conservancy (Fig 1). Incidences of vegetation clearance for purposes of firewood and construction material e.g., illegal harvesting of the endangered cedar trees, were prevalent (Fig 2). This is also a common activity on the adjacent farmlands. We also witnessed groups of people, visiting the caves and religious activities (prayer sessions) in caves (Fig 3).
Educate the tour guides, local farmers pastoralits and school pupils on roost conservation, monitoring protocols, capitalizing on cooperative relationships to protect key roosts.				I held a successful consultative meeting with 10 board members of the conservancy (Fig 4) and the local community members (Fig 5). Then carried out the awareness campaigns in four schools and three local community groups. I supplied printed information as banners, and t-shirts, to demystify folklore about bats and to highlight their importance in ecosystems. Five tour guides were trained on bats, and they will also continue to deliver knowledge to visitors on the impact of disturbance to the caves.
Engage communities in tree planting exercise to promote and catalyse protection and restoration of local				This goal was partially completed because the tree seedlings were not enough to cover the expansive areas in the conservancy that are degraded. Community members participated in

forests as foraging habitat for bats.				this initiative by planting 7000 indigenous trees near caves and foraging areas. Therefore, the plan is to expand the tree nursery that can supply between 15000-20000 seedlings) that would be managed by the youth and women groups.

2. Describe the three most important outcomes of your project.

a). We have documented seven volcanic tunnel-caves that are accessible and host the vulnerable Harrison's giant mastiff bat. This will directly contribute to informed and enhanced cave management to protect the sensitive and fragile cave environments, Harrison's giant mastiff bat and other threatened cave taxa. This project also revealed other natural access to the remaining caves and will inform additional conservation actions.

b). The management and staff of the conservancy are now aware of critical roles of bats, and they will enhance a community-based conservation approach geared towards sustained bat populations resulting in an improved flow of economic and ecological services bats provide.

c). We now have a reforestation program for the conservancy supported by residents that guarantees protection and maintenance of native forest ecosystem. Consequently, reforestation will mitigate the impacts of climate change on soil and water cycle loss and degradation while providing important habitats for endangered biodiversity.

Empowering local communities on best practices to minimise bat-oriented conflicts by exchanging knowledge and working together, and the willingness to support bat conservation efforts as well as catalysing local ownership of the project.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

Following the deliberations with the management of the conservancy, we realised that setting up gates/fence would interfere with free movement of other animals e.g., cheetah, olive baboons etc., in the caves. Instead, we constructed a small office, which was important and a step that was desperately needed so that people can report, register, and then be accompanied by tour guides to visit cave sites or other places within the conservancy.

4. Describe the involvement of local communities and how they have benefitted from the project.

The residents were involved during the awareness meetings. They were also involved during tree planting exercises and run the tree nursery, provided seedlings. This initiative of tree nurseries aimed to assist the community members to be part of the custodians in the management of the conservancy. The tour guides who were my

assistants to the project implementation were the trained, besides payment for participating in project activities. People who live around the conservancy are directly concerned by the conservation initiatives I undertook. They are aware of the risk of climate change and therefore, they actively engaged planting of tree knowing that it will ameliorate the arid conditions at Suswa.

5. Are there any plans to continue this work?

Yes, I have plans to continue with this work as there were several gaps that I identified during project implementation which ought to be addressed. For example, 12 caves ought to me mapped, named using local names, including species assessments. I intent to seek funding to purchase a A FLIR Systems SR-19 thermal cameras to estimate bat populations in caves. The assessment will be part of the on-going effort to update information for the Harrison's giant mastiff bat is currently listed as Vulnerable on the IUCN Red List and therefore requires maximum protection. I have concrete plans to continue bat research and conservation activities in Kajiado and Narok counties. I would continue to follow both short- and long-term measures for bat conservation in these counties. Bat education and awareness campaigns for school children will remain the top priority to bring a paradigm shift in the thinking. This long-term strategy will convert this community from foes to friends of bats. The reforestation programme would be strengthened so that the community members can manage tree nurseries and the surplus be sold for their personal use to improve their livelihood.

6. How do you plan to share the results of your work with others?

A report will be submitted to the conservancy and Kenya Wildlife Service (KWS) to be included in their annual magazine and website. I will present my work in local and international conferences and, workshops.

7. Looking ahead, what do you feel are the important next steps?

I believe that the strategy devised in this project is the most effective method for achieving bat conservation in Mount Suswa Conservancy, and it is possible to replicate it in other places in the country. Bats are generally considered to be odious and disliked by society. Historically, they are associated with witchcraft and were thought to transmit COVID-19 viruses. Shifting the existing paradigm and convincing people of bats' positive role in the ecosystem is challenging. A lot of coordinated efforts are needed to turn them from "bat enemies" to "bat friends". This problem can be overcome by educating schoolchildren about the importance of bats at an early age and training them to become stewards of bat conservation. As a result, school-based awareness-raising campaigns should be continued.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Rufford Foundation logo was used on all the banners, brochures and booklets which were displayed or distributed. RF was mentioned during our meetings and will be acknowledged in subsequent publications.

9. Provide a full list of all the members of your team and their role in the project.

In partnership with the Mt Suswa Conservancy, **Mr Jackson Shonko** was the Community Liaison Officer. Jackson coordinated our planned activities i.e., meetings to foster an environment that promoted and embraced community involvement and engagement.

Erick Keter was my assistant who actively participated in the execution of project activities. He was instrumental in our education awareness campaign in schools and community groups and in tree planting exercises and environmental restoration programs.

10. Any other comments?

I am extremely grateful to RF for the provision of financial support. Through this grant, one of my assistants was trained in bat research, so he can now conduct his own research when he registers for graduate school. This grant played a key role in my research work which I am sure will contribute to the global efforts of biodiversity conservation. RF is an organisation I am grateful for, and I hope that it will continue to offer support as we work to fill the identified gaps and add other research components to enhance the conservation effort.

Figure 1. Burning of charcoal within Mount Suswa Conservancy for sale at Suswa town and illegal harvesting of endangered cedar tree species as construction material.

Figure 2. Clearance of vegetation to create room for agricultural production.

Figure 4. Consultative meeting with the local community members to carrying out a community awareness program.

Figure.5. A visit to the caves with Mount Suswa Conservancy board members.

Figure 6. Students and community members at Kisharu Primary School receive awareness education.