

Final Evaluation Report

Your Details	
Full Name	Jean Claude Tumushime
Project Title	Restoring roost sites for straw-coloured fruit bats <i>Eidolon helvum</i> and changing negative public perceptions about bats in Kigali and neighboring cities, Rwanda
Application ID	28346-2
Grant Amount	4,999
Email Address	tumuclaude@gmail.com
Date of this Report	08 th -May-2021

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
To restore degraded roost sites by planting fast growing indigenous trees at roost sites				
Conducting sensitization and awareness campaigns in communities surrounding roost sites and schools neighbouring bat roost sites to showcase the importance of bats as providers of critical ecosystem services to the health and benefit of ecosystems and humans.				
To develop educational teaching materials about bats to showcase the importance of bats and the threats they face.				
To take advantage of the PI as a veterinarian in helping people on how they can avoid direct interaction with bats as to alleviate negative perceptions				
To elevate <i>E. helvum</i> conservation initiatives at national level by organizing meetings with agencies (public and private) who have a stake in wildlife conservation.				Some agencies still link bats with the source of the ongoing COVID-19 pandemic; this thinking undermines elevation of bat conservation at national level. However, we are committed to continue engaging these organisations.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled.

The COVID-19 pandemic started at a time when we were starting to implement our project. This brought some difficulties especially the delay in conducting field activities due to the national lockdown imposed afterwards. Fortunately, when the lockdown was lifted, we used the networks we had established earlier to accelerate the implementation of project activities and we achieved the set goals.

3. Briefly describe the three most important outcomes of your project.

- Our project led to the repopulation and restoration of the roost sites for the straw-coloured fruit bats by planting fast-growing indigenous trees and initiated talks/conversation about roost site protection at our working sites- Camp Kigali and Musha (though this will require continued follow up).
- A knowledgeable/sensitised community especially the young generation (students and pupils) about the importance and necessity of bat conservation in the environment and ecosystem in particular.
- Bat teaching materials were produced (e.g.: comic books) and availed to key stakeholders including wildlife policy makers (schools and agency in charge of wildlife conservation) for promotion of bat conservation.

4. Briefly describe the involvement of local communities and how they have benefited from the project.

The local communities had an opportunity of participating in workshops that were meant to sensitise them on the importance of bat conservation. Most importantly members enjoyed participating in planting roost trees, an activity that increased their knowledge about bat habitats and made them feel part of bat conservation movement. Lastly, the bat teaching materials that we designed and shared with students/pupils helped them understand more the necessity of protecting bat habitats and promoting bat conservation in their respective schools.

5. Are there any plans to continue this work?

Yes, especially in these COVID-19 times whereby bats are wrongly linked to this ongoing pandemic. Misconceptions about bats as the carriers of deadly viruses are increasing at alarming levels especially in our societies that are less educated and with limited knowledge about the importance of wildlife conservation and bat protection. We still have people who feel and think culling bats, evicting bats from houses, cutting their roost trees will protect them from contracting deadly diseases (yet all these adverse activities contribute to the spill over of pathogens from animals to humans). Therefore, we need to continue this work of promoting bat conservation; in fact, it is now or never considering the negative publicity about bats that is being spread by some media coverage that bats will transmit viruses to people. As a veterinarian I plan to continue engaging people from conservation and public health perspective to work together in informing the public on how to live safely with bats.

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

We shared a formal report with Rwanda Development Board's Conservation Department as the body in charge of wildlife conservation. The results will also be shared through our meetings with stakeholders. The teaching materials especially the comic book we developed will be distributed to more schools so that a big

number of students/pupils learn about bat conservation. We intend to share our results with a new organisation called Global South Bats that brings together bat scientists/conservationists from Africa and Latin America with the mission of promoting bat conservation in their countries.

7. Timescale: Over what period was the grant used? How does this compare to the anticipated or actual length of the project?

We used 20 months instead of 12 months that were proposed in the project. This delay was caused by a series of lockdowns imposed in the country to prevent and contain the spread of COVID-19.

8. Budget: Provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Allowance for the project PI and Project Assistant	700	700		
Facilitation for 2 interns who helped in disseminating teaching materials to schools	80	80		
Printing and stationery (comic books, banners and leaflets) containing bat information	726	820	+94	We printed more comic books as anticipated
4 balls for foot and volley used during campaigns	60		-60	Foot and volleyball matches were not allowed during COVID-19 time
Speakers and microphones that will be used during campaigns	220		-220	
T-shirts with straw-coloured bat signs to be given to members of environmental students' clubs school and teachers at 2 schools	350	300	-50	
Hiring venue for all workshops during project implementation	210	210		
Allowance for workshop participants (20 teachers from schools + 10 local leaders and opinion leaders)	300	300		

Allowance for a workshop facilitator from Environmental agencies (£20 per day for 3 days)	60	60		
Hiring a car that will be used in distributing seeds at roost sites	650	650		
Allowance for a part time forester who will manage the tree nurseries in 3 months	330	420	+90	The project implementation took longer than expected and a certain amount was added to the budgeted allowance.
Training on tree planting for members of Environmental clubs at 2 schools	70	70		
Rainwear for 2 casual laborers plus 1 forester	90	90		
2 Casual laborers for 3 months	330	420	+90	The project implementation took longer than expected and a certain amount was added to the budgeted allowance.
4 Pairs of thick gloves that will be worn during preparation of tree nurseries	8	8		
Renting 2 sites where tree nurseries were established	80	120	+40	
Spades, sprayers, watering cans, hoes, machetes and wheelbarrow	125	65	-60	We got a discount
Tree nurseries and planting for roost restoration	610	700	+90	
Totals	4999	5013	+14	

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

The COVID-19 pandemic jeopardised and slowed the momentum for bat conservation that was starting to build up in Rwanda. People especially those living in the towns where most of *E. Helvum* roost sites are found developed unfounded fears that Coronavirus originated from bats. Because of this misinformation about bats, we propose to take the following steps in the future:

- We shall initiate a continuous outreach programme that will focus on sensitising people on how to live safely with bats through our trained bat champions. In this programme, topics related to bat and infectious diseases will be extensively and thoroughly discussed.

- Continue advocating for giving bats the full legal protection like other large wild animals that are legally protected.
- By using the evidence based data; we shall show that most of viruses that are carried by bats are not pathogenic to humans, as it was demonstrated in the study on Coronaviruses in bats of Rwanda that I co-authored (<https://pubmed.ncbi.nlm.nih.gov/31811597/>).

10. 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?

Yes, we used the Rufford Foundation logo in all materials we used.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Dr Jean Claude Tumushime

Myself, I served as a project Investigator where I coordinated and oversaw all the project activities including the finances. I generated reports for the stakeholders, and I am currently conducting post project activities.

Kabahizi Ferdinand

He worked as forester/botanist for our team. He established tree nursery, supervised the management of tree nursery and advised the team during planting of trees.

Dr Nzayisenga Gaspard

He worked with our team occasionally, where he helped in developing teaching materials and he helped in planting trees at roost sites.

12. Any other comments?

First and foremost, we are grateful for the RF grant that made the implementation of this project possible. Without this support, we wouldn't have been able to conduct this project. Secondly, people are using COVID-19 pandemic as a pretext to target bats and their habitats on the false grounds that bats transmit deadly diseases to communities (this happened in the recent past in Rwanda). There is a need to continue intensifying educational programmes that advocate bat conservation and protection of their habitats especially in densely populated areas where human-bat interactions are intense.

Lastly, we would like to express our apologies for not having been able to complete this project on time due to unforeseen circumstances brought by COVID-19.