

The Rufford Foundation Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details

Your name	Nancy Felix
Project title	Saving Vulnerable Lion (Panthera leo) from Retaliatory Killing in Tarangire-Manyara Ecosystem through Community Capacity Building and Conservation Education
RSG reference	27308-1
Reporting period	January 2019- January 2020
Amount of grant	£ 4,988
Your email address	nancyfelix25@gmail.com
Date of this report	14 th February 2020

1. Please 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
Raise biodiversity conservation through community conservation education to villages surrounding Tarangire-Manyara Ecosystem on lion conservation.				Assessment of community attitudes towards lion conservation was carried out. This enabled us to develop appropriate measures and skills to be used on providing lion conservation education to villages with lion killing incidences and those with none. This was achieved with support from conservationists found around Tarangire-Manyara ecosystem.
Collect information about the current lion population				Survey of lion populations was achieved.
Collect information about the retaliation killing incidences				Data on lion killing incidences was minimal as people hesitated to disclose such information.
Conduct community capacity building				We conducted meetings with village leaders, community members and focus group discussions with several groups of selected people. Tree seedlings were given to villages to plant around their livestock enclosures that were supplied with the chain-fence to have the live wall.
Other Achievement				
Paper in preparation				A paper to be published in peer review scientific journal is under preparation.
Improved networking				Visiting villages were people (school children and adults) who were more interested in practising conservation issues and currently were willing to cooperate positively with researchers

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

The first challenge was the remoteness of some villages. They had poor roads that led to change in the means of transport from using a car to a motorcycle. With the motorcycle we managed to reach each household as how it was planned.

Secondly was the selection of households where the support of chain-fences and seedlings would be given. After the survey of determining community attitude towards lion conservation as well as recording of villages and their members who had lost livestock from lion attacks, we obtained a large number of people who required immediate support for protecting livestock but unfortunately the available funds were not sufficient. Therefore, we had to select households that had encountered frequent livestock losses 2018 to 2019 and verified the information from village government leaders.

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

a) Community attitudes towards lion conservation

The survey revealed distinct attitudes of people towards lions and wildlife at large. Individuals that had lost their livestock from lion attacks had negative attitudes and killed large number of lions, while people that had never encountered livestock loss had positive attitudes and rarely or never killed lions.

Although, there is variation in attitude and perception towards lions, there is a room for improving conservation education to ensure the survival of the lions in the ecosystem. Through conducting various meetings, focus group discussions and training programmes in the villages, the project managed to gain acceptance by the people that would in future lead to improving their understanding of lion conservation.

b) Community involvement and willingness to participate in conservation works.

The commencement of the community capacity building programme faced difficulties of people's rejection. This was tackled by conducting meetings with village leaders and traditional elders first. These people were the ambassadors in educating the local villagers to accept the support of seedlings and chain-link fencing for protecting livestock. The livestock enclosures were first constructed in the village leaders' houses for demonstration and also to gain community trust thereafter, where constructed to other people that willingly agreed to participate.

c) Potential increase in lion population

Lion monitoring during the surveyed period provided us with adequate information of the number of lions currently in the ecosystem. Moreover, the records of lion killing have decreased as the main threat that led to fluctuations of lion population in the ecosystem. Therefore, the number of lions within Tarangire-Manyara ecosystem has substantially increased. This was proved by sighting of lions in areas that were not occupied after 10 years of their consecutive decline.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

Local communities' involvement occurred from project initiation to the final accomplishment. Not only local communities but several stakeholders were involved. During project initiation, the introduction of project activities was carried out with different groups of people; government officers from Tarangire National

Park, Wildlife Management Area, NGOs, village leaders and traditional elders through meetings. In the meetings, skills and technique that will be used to educate the community were presented to them to obtain their support and acceptance before commencing any activity that would require local community involvement.

During the implementation of the objective that aimed at determining the attitude of the community towards lion and raising conservation education. Local villagers were employed as local guides to help in translating the questions in Maasai dialects to the interviewee during the questionnaire survey.

When collecting information on lion killing from villages surrounding the ecosystem. Local villagers selected from each village were assigned to report to the project team any livestock attack and lion killing attack during the entire period of project implementation. With an agreement of a small reward for every piece of information received that would be approved by the village leader.

The implementation of community capacity building was preceded with formal and informal discussion with village leaders and local people respectively. These aimed at selecting preferred seedling for fencing their livestock enclosure and what would be the appropriate measure for monitoring. Moreover, village leaders were assigned to monitor the progress of the living wall fences after installation to the selected household and report the updates to the project team.

5. Are there any plans to continue this work?

Yes, I and my project team are planning to have a lion conservation programme. We shall focus on improving livelihood of its people through diverse economic activities

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

Local communities: The results will be presented through village meetings and a copy of what has been obtained in a summary form to allow people understand shall be given to the surveyed villages.

Conservationists and Researcher: PowerPoint and poster presentations shall be conducted to communicate the findings. Also, the work shall be published in peer reviewed journals to communicate with researchers from other parts of the world.

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

The Rufford Foundation grant was used for 13 months (January 2019 to January 2020). Project was initially established to last 12 months, but due to some logistics that include permits, car breakdown we had to extend up to January 2020.

8. Budget: Please 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.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Stationary cost (photocopy, notebooks and pencils) for the project team	100	100		
Field boots	96	96		
GPS	192	192		
Tree seedling	1000	1500	+500	The tree seedling selected were of higher price than what was expected, the difference was obtained from allowance.
Field assistance	1200	700	-500	We reduced the amount and number of assistances to get more seedling
Accommodation costs when conducting community conservation education and capacity building	160	160		
Accommodation costs when collecting information on lion killing events	80	80		
Accommodation costs when collecting information on lion population	120	120		
Transport cost when raising awareness on conservation and capacity building	480	480		
Transport cost when collecting information on lion killing incidence	360	360		
Transport cost when collecting information on lion population	1200	1200		
Total	4988	4988		There was no difference but just relocating of some

				funds
All are in £ sterling and used exchange rate for local currency (Tanzania shillings) to £ sterling (GBP) 1 GBP = 3,0120.13 TZS				

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

There are a number of things including:

- 1) Proceeding with monitoring of lion retaliation incidents and lion attacks on livestock so that we can improve measures to be taken and prevent both livestock and wildlife loss.
- 2) Collecting more details from pastoral communities on their economic activities, so as to increase diversification of what they can do to raise their income and improve their livelihood.
- 3) Requesting for a second-round funding from Rufford to proceed with monitoring the conservation of lions and more putting efforts that with promote community into conserving their natural resources.

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

Yes, I have been using the Rufford Foundation logo in my proposal presentation, the progress report presentation and thesis defence, also I used the logo while in the field. I will continue to acknowledge Rufford Foundation in all the materials (journal papers, flyers and posters) that I will produce in relation to this project.

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

Nancy Felix

The team leader and Principal Investigator of the project. I participated from project initiation, implementation including data collection and analysis to project completion.

Bernard Kissui, Ph.D.

The main advisor during project implementation and Principal Investigator of the Tarangire Lion Project

Anna Treydte, Ph.D.

The main academic supervisor during the study period. She is an Associate Professor at the Nelson Mandela African Institution of Science and Technology.

Samson Meijo

Field assistant he was assisting in household surveys, as he speaks Maasai language.

Saitoti Mollel

Field assistant he was the driver of both a car and motorcycle during the field survey of conservation education and recording of lion killing incident.

Deo Tarimo

Tarangire Lion project coordinator, he was assisting I data collection during lion survey.

Lowassa Kitiko

Field assistant he was reporting on the lion killing incidences from the villages

Kilisuu Loibulu

Field assistant he was reporting on the lion killing incidences from the villages

Daniel Kawogo

Assisted in data entry and data cleaning

12. Any other comments?

I am very grateful to the Rufford Foundation for the financial support to implement this project. Moreover, more research has to been done within Tarangire-Manyara ecosystem for conserving wildlife but largely to improve community wellbeing so they can as well value wildlife.