

Final Evaluation Report

Your Details	
Full Name	Houssein Samwel Kimaro
Project Title	Influence of woody plant encroachment on the prevalence of gastrointestinal parasites in pasture
Application ID	39651-2
Date of this Report	09/08/2024

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
Assess changes in pastures gastrointestinal parasites load along the woody plant encroachment intensity gradient				
Assess the impact of tree canopy on gastrointestinal parasites load across seasons				
Assess variation of soil moisture and temperature among the established encroachment intensity levels				Following in-cooperation of experimental approach in study design and implementation of the project, this objective was implemented as part of experimental approach that simulated tree canopy shade. Thus, it was achieved as part of tree canopy shade effect through experimental approach and not part of woody plant encroachment through observation study.

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

As per preliminary results that I have so far, the following are the important outcomes.

- a) Demonstrating the micro-climate effect of tree canopy on pasture larvae through experiment and supported data from field observation study, as well as demonstrating effect of woody encroachment on pasture larvae.
- b) Providing evidence of variation in pasture larvae density i.e., higher pasture larvae density in wet season than in dry season, with supported temperature and relative humidity.

- c) Demonstrate variation in larvae between short grass height and high grass height areas under different climatic conditions and shade availability, with supported temperature and relative humidity.

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

1. Bringing in experimental approach into the study design and budget limitation. Through financial support from University of Glasgow (EEID project), In-Kind support College of African Wildlife Mweka and TAWIRI we were able to manage the changes of plans and cost to implement the experimental approach and observation study.
2. Supervising the project remotely and availability of key technical personnel, I experienced difficult situation in managing the project remotely especially the logistic of ensuring the availability of technical personnel timely.

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

Plans for engaging local communities as part of dissemination of the findings and exchange of knowledge have started. We think the finding might be useful for managing livestock, and community grazing land that have been encroached by woody plant as well as other savanna areas.

5. Are there any plans to continue this work?

Yes, there are two options under consideration for future continuation of the work.

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

Through presentations in conferences, to key stakeholders including local communities and publications.

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

First is analysis, write up and submission of the manuscript to journals. Secondly planning, write-up and submission of the third grant proposal to Rufford.

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

Yes, during presentations/talks in different institutions as well as progress reports.

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

1. Hussein Adam -Laboratory technician -involved in experimental set up, field observation, pasture larvae count, and data entry.
2. Mary Zebedayo -Laboratory technician - involved in field observation, pasture larvae count, and data entry.

3. Jeremia Sarakikya – Field personnel – involved in preliminary survey of the study (field observation), assessment of sunlight and intensity of use by herbivore in different tree shade.
4. Baraka Shabani -Field Personnel – involved in assessment of sunlight and herbivore use in different tree shade, pasture sampling from encroached sites, and under tree canopy.
5. Lameck Jacob - Field personnel - involved in preliminary survey of the study (field observation), assessment of sunlight and herbivore use in different tree shade.
6. Frank Mwakajoka – Driver and field personnel – Involved in involved in experimental set up and field observation.

Partners involved

1. Jason Donaldson – Sensor setting, and preliminary processing of the sensor data.
2. Thomas Morrison – Supervision of the project and logistical guidance
3. Alex Kisingo – Fieldwork guidance and logistics support
4. Grant Hopcraft - Logistical support
5. Jafari Kideghesho - Logistical support
6. Anna Treydte – Scientific Inputs and guidance at different stages of the project.

10. Any other comments?

Limited time, we could not fully complete activities such as community engagement due to time limitation and un-expected longer duration of data collection due to logistical issues that occurred due to need of updating permits, and technical personnel availability. Nevertheless, the project has managed to collect important data that will help in understanding impact of vegetation i.e., woody encroachment and tree shade on pasture larvae. The findings of the project will be the foundation in community engagement.