

Final Evaluation Report

Your Details	
Full Name	John Erasto Sanare
Project Title	<i>Exploring Human-Elephant Coexistence: Testing a conflict mitigation tool for elephant in Enduimet Wildlife Management Area, West Kilimanjaro</i>
Application ID	42439-B
Date of this Report	12/12/2024 – amended 05/03/2025

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 assess the effectiveness of beehive fencing as a deterrent against elephant crop raiding				Beehive fences can be a sustainable local method to reduce crop damage by elephants and to generate supplemental income for farmers in EWMA
To assess farmers perceptions of beehive fencing and coexistence with elephants				Farmers need a sustainable and integrated solutions that not only reduce damage by elephants but also increase their value for local people
To raise awareness about elephant conservation among communities residing in or near elephant habitats				Local communities' approach to minimise HEC and outreach programmes have been carried out. After elephant conservation and awareness workshops and seminars local community have a better relationship with the wildlife management authorities managing the EWMA and feel now their voices are being heard.

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

a). Community increased awareness of the importance of beehive in conservation and mitigating human-elephant conflicts.

b). There was increased desire by communities adjacent to protected area to learn other alternative livelihood activities, that would reduce their dependence on resources from protected area.

c). Community members own initiative to assist other farmers that had challenges in beekeeping across villages adjacent to EWMA.

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

Regarding the project implementation, there were no major problems encountered. However;

- a) We experienced some delay in obtaining the research permit from the Tanzania Commission of Science and Technology (COSTEC); an Authority responsible to issues research permits in the country. We tackled this by pushing the respective authority to release the permit in time in order to achieve the project objectives at the right time.
- b) In most cases, the team was having to be flexible and changing schedules on workshops and training timetables due to other continuing programmes and other planned activities by the community.
- c) One of the areas where the human-elephant mitigation measure was to be set up had to be changed to different site that was away from the protected area boundary, to overcome this challenge, identification of hotspot conflict areas near the EWMA was done.

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

The local communities in EWMA were involved starting from the identification of the conflict hotspot areas to the implementation of the mitigation measures. Since the beehives belonged to different farmers, it helped to link up with other community groups surrounding the EWMA as well as others that had beehives around their homesteads.

Also, the community benefited from the project by engaging in setting up the mitigation measures that protected their farms from elephant crop raids as well as learning more on locally available tools that they can use to other wildlife away from their farms.

5. Are there any plans to continue this work?

Yes, we were able to assess the potential of beehives as a mitigation measure for Human-Elephant Conflicts (HECs), considering the severity of the damage and proximity to the EWMA, with support from the government, which has been advocating for sustainable livelihoods. I intend to continue supporting HEC mitigation efforts through community-based conflict management strategies, including the promotion of alternative crops and increasing awareness among local communities and stakeholders about elephant movement, behavior, and habitat. Additionally, I plan to research stingless bees that could be suitable for communities with small land parcels, helping to reduce their reliance on encroaching into protected areas.

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

Our findings have been shared through seminars, conferences and meetings, we are also continuing to share our results through work presentations and social media. Moreover, we are planning to submit a scientific paper for publication in scientific journal to inform the community, decision makers and public in large on the best way to conserve elephant. Additionally, we are planning to present our results via a poster presentation in the upcoming 16th Tanzania Wildlife Research Institute scientific conference which will involve prominent wildlife conservationist across the world.

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

Elephant conservation should be closely linked to the livelihoods of local communities. Without improving the livelihoods of local people, successful conservation efforts cannot be implemented. Therefore, I will explore conservation-friendly alternatives to enhance their livelihoods. In the next step, I aim to continue supporting HEC mitigation through community-based conflict management strategies, including promoting alternative crops and raising awareness among communities and other stakeholders about elephant movement, behavior, and habitat. This approach will help build their capacity to avoid conflicts with elephants and foster public support for elephant conservation. Effective conservation and management of elephants require a deep understanding of their migration behavior and their role in seed dispersal. No studies have been conducted on this species in EWMA to date, making elephant migration and population structure across the EWMA a pressing need.

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?

Yes, all of our posters, fliers, brochures, posters, presentations, and t-shirts had a Rufford logo as it increased the publicity of the foundation. We will also acknowledge the financial support of Rufford Foundation in our manuscript for publication.

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

John Sanare: conducted research activities including data collection, data analysis, presentations, results disseminating and outreach activities.

Kimani Mollel: Supported the project as a field research assistant.

Kisota Laizer: Assisted as a ranger in Kitendeni wildlife corridor.

Rehema Mosses: Assisted in data analysis.

Damian Nguma: Assisted in designing the methodology for data collection.

10. Any other comments?

would like to express my deep gratitude to Rufford Foundation for providing the funding to carry out this work. This project would not have achieved most of the outputs without financial support. I would like to thank EWMA management team for their support. I appreciate the cooperation of local people and community members. My sincere thanks go to all the referees for their recommendations and continuous guidance. HEC remains to be the major reason of elephant decline, so this work is not only sufficient to save this endangered elephant species. Since we are continuing the efforts in EWMA with hope of co-existence with local people and elephant. Therefore, we look forward to Rufford Small Grant for parallel support in these missions. Last but not a least, I would like to thank to all who supported directly or indirectly to accomplish this project.