1. Background information

Human-Elephant conflicts (HECs) present a significant challenge due to the danger elephants pose to human lives, often resulting in local communities resorting to killing elephants in retaliation. The widespread occurrence of these conflicts has prompted extensive research into the reasons behind elephant crop-raiding and its consequences. However, while there are commonalities across different conflict situations, each location also presents unique challenges. Additionally, existing studies tend to focus on specific aspects of these conflicts, overlooking the complexity of the issue, which demands a comprehensive understanding of local crop-raiding characteristics and patterns, as well as careful implementation and monitoring of mitigation measures. The local communities have been trying to mitigate the conflicts through different traditional non-lethal strategies which include noise making, making fire, use of torches, burning of chill bricks, chill burning, farm guarding, use of dogs to scare elephant etc. Unfortunately, almost all strategies have failed to achieve the goal as they lose their effectiveness with time. Nevertheless, mitigation strategies such as trenches, electrical fences and light flashes are crucial but often expensive and raise animal welfare concerns. Yet, beehive fencing has been demonstrated to be one of the effective HECs mitigation strategies through reducing crop raids by elephants. While beehive fences can play the crucial role of minimizing HECs and improving community livelihoods by increasing crop productivity and honey harvesting, its effectiveness remains untested in Tanzania. Therefore, the proposed project in Enduimet Wildlife Management Area (EWMA) aims to; (i) assess the effectiveness of beehive fencing as a deterrent against elephant crop raiding (ii) assess farmers perceptions of beehive fencing and coexistence with elephants and (iii) raise awareness about elephant conservation among communities residing in or near elephant habitats.

2. Project activities conducted from January to April, 2024

Following adjustments to our project plan to address unforeseen challenges, our project officially commenced in 7th February 2024. Initially, we obtained a research permit from local authorities and notified the Enduimet Wildlife Management Area (EWMA). The permit was secured from the relevant authorities, granting permission to engage with village communities in the study area. Subsequently, the project team conducted an inception meeting with both the EWMA and the local communities neighbouring the EWMA. These meetings served to comprehensively outline the project's objectives, goals, and planned activities for the project's duration. It was imperative to involve these stakeholders to ensure their understanding and endorsement of the project, as shown in (Figures 1 to 3). Through these initial steps, we established a solid groundwork for the successful execution of planned activities in the study area, laying the foundation for effective project implementation.





3. Ongoing project activities and future plan

The team is preparing for upcoming activities which will focus on work closely with the local community to build the fences, introduce beekeeping skills, and monitor the success of the fences as an elephant crop raiding deterrent on the plots with crops during the elephants' crop raiding season (June September). Furthermore, we will assess farmers perceptions of beehive fencing and co-existing with elephants; evaluate participants by interview and questionnaire to ascertain the beehive fencing as deterrent measures.