# RUFFORD SMALL GRANTS RESEARCH FUND

# **PROJECT TITLE:**

FROM INSECURITIES TO CO-EXISTENCE; UNDERSTANDING CAUSES, MAPPING HOTSPOTS AND BUILDING LOCALS' CAPACITY ON HUMAN ELEPHANT CO-EXISTENCE

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# **INSTITUTIONAL AFFILIATIONS**

- 1. College of African Wildlife Management, Mweka
- 2. Nelson Mandela African Institution of Science and Technology

STUDY AREA/LOCATION: Mkomazi National Park (Mwanga and Same Districts)

PHASE 2: Community capacity building on Human Elephant Co-existence in Mkomazi National Park



## 1. Executive Summary

This report summarizes the impact of a school engagement program on Human-Elephant Coexistence (HEC) near Mkomazi National Park, targeting over 200 students across five schools. This effort aimed to foster early understanding of HEC, encouraging youth to become advocates for coexistence with wildlife. Through a pre- and post-engagement evaluation, we assessed changes in students' knowledge and attitudes, observing significant improvements in awareness and empathy.

#### 2. Introduction

## **Background and Significance**

Mkomazi National Park is currently faced with an escalating challenge of human elephant conflicts consequently impacting negatively the ecological sustainability, people's safety, food security, and the welfare of the local communities living in close proximity. It is anticipated that this challenge will exacerbate in the near future as human population grows. Hence, preventing and mitigating HECs to a tolerable level in the area should be a top conservation priority. The goal of the current project is principally to reduce elephant retaliation and livelihood insecurities caused by crop raiding, property damages or human attacks by understanding the causes, temporal patterns and mapping conflict hotspots for HEC. The aftermath is to raise conservation awareness in the conflict hotspots and come up with the best management guidelines and practical solutions (low-cost, low-technology) for human Elephant co-existence.

The growing need for a sustainable coexistence strategy underscores the importance of engaging youth early on. The Youth Engagement Program was designed to:

Introduce students to the concept of HEC, its causes, and mitigation strategies.

- Foster empathy and an understanding of elephants' ecological roles.
- Encourage a new generation to adopt conflict-prevention practices in their communities.

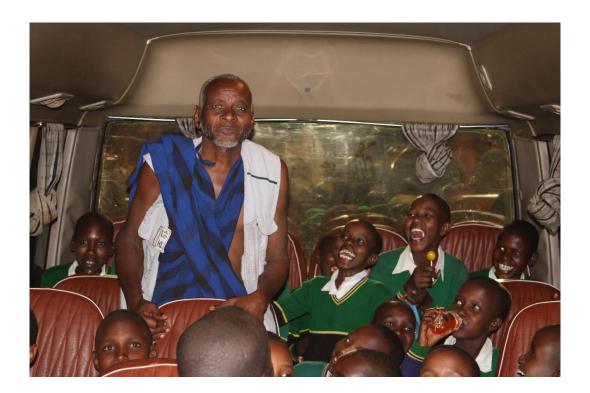
Over the course of the program, students received interactive sessions on elephant behavior and HEC, incorporating pre- and post-engagement assessments to measure changes in knowledge and attitudes.

# School selection and participants demographics

The program engaged five schools in high HEC areas, reaching students aged 12-16. Selection was based on schools' proximity to conflict zones and communities with a history of HEC incidents.

The engagement included two primary sessions:

- **Pre-Education Assessment**: A seven-question survey gauged baseline knowledge and perceptions.
- **Interactive Lesson**: Students learned about elephant ecology, HEC challenges, and mitigation strategies through multimedia, discussions, and specimen demonstrations.











• **Post-Education Assessment**: The same questions were revisited, allowing for comparative analysis of knowledge retention and attitude shifts.

## **Pre- and Post-Evaluation Questions**

- 1. What do you know about Human-Elephant Conflict (HEC)?
- 2. How often do elephants cause problems in your community?
- 3. Why do elephants raid crops and enter human settlements?
- 4. What are some ways people can avoid conflicts with elephants?
- 5. What role do elephants play in the environment?
- 6. How would you feel about sharing land with elephants if it meant fewer conflicts?
- 7. Would you share what you learned about HEC with family or friends?

## 2. Findings and Impact

#### a. Pre-education assessment.

The initial assessment showed limited knowledge on HEC and a high perception of elephants as threats. Key findings included:

- **HEC Awareness**: Only 25% of students had a basic understanding of HEC.
- **Elephant Behavior Understanding**: Most students (60%) did not know why elephants enter human settlements.
- **Perception**: 70% viewed elephants solely as threats to crops and property.

#### b. Post-education assessment results

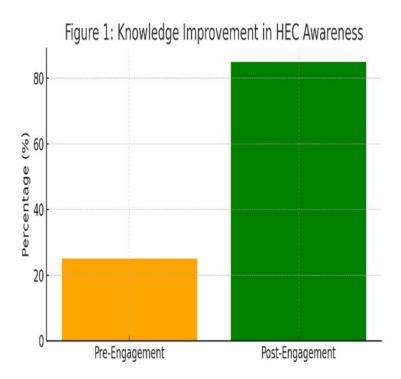
After the engagement, students exhibited marked improvements in understanding and empathy:

- **HEC Awareness**: 85% of students could clearly explain HEC causes and list conflict mitigation methods.
- **Understanding of Elephant Behavior**: Knowledge of elephants' natural behavior and migration needs increased by 55%.
- **Empathy for Wildlife**: Positive perception of elephants rose from 30% to 80%, with students expressing a balanced view of elephants as both community resources and conservation priorities.

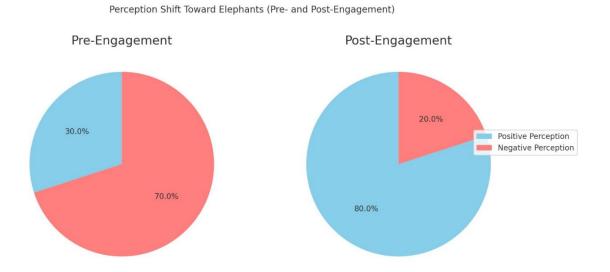
## c. Quantitative Impact

- Total Reach: 200+ students across five schools.
- **Knowledge Increase**: Average knowledge scores rose by 60% post-engagement.
- **Empathy Shifts**: Students' willingness to consider coexistence with elephants increased from 25% to 75%.

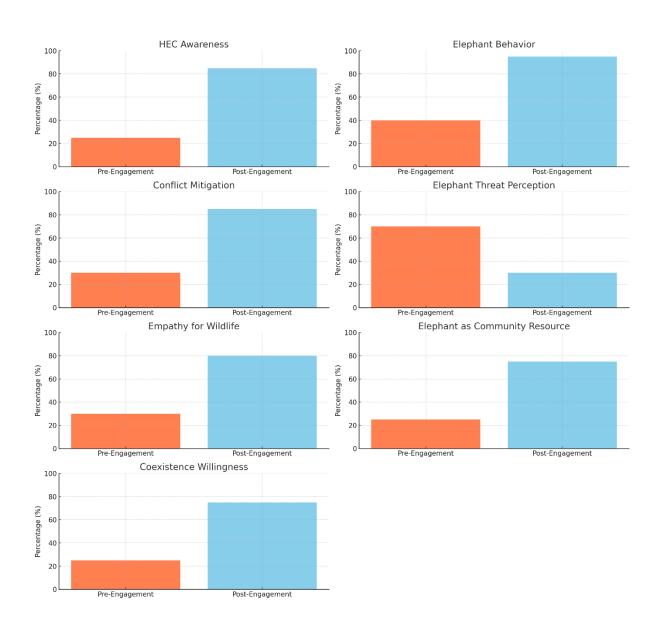
# 5. Visual Summary of Impact



1. **Figure 1: Knowledge Improvement in HEC Awareness** – A bar graph showing the increase in awareness post-engagement.



2. **Figure 2: Perception Shift Toward Elephants** – A pie chart highlighting the shift from negative to positive perceptions.



3. **Figure 3: Question-by-Question Pre- and Post-Assessment Comparison** – A multibar chart showing responses for each of the seven questions before and after the engagement.

#### 6. Stories from the Field

Stories of individual student reflections on what they learned, such as Agness's Paul change in perception from seeing elephants as "scary animals" to understanding them as "neighbors needing space," reinforce the program's impact.

#### 7. Conclusion

The school engagement program successfully raised awareness, fostered empathy, and promoted coexistence strategies among youth in Mkomazi. With the pre- and post-evaluation showing a clear impact, future initiatives should consider expanded reach and ongoing follow-up. For the Month of October – November we will be running a training of Trainers Workshops with identified people.

#### 8. Recommendations

To enhance the program's reach, we recommend:

- Regular Follow-Up Sessions: Reinforcing learning through quarterly sessions.
- Curriculum Integration: Embedding HEC topics into local school curricula.
- **Involving Community Leaders**: Engaging leaders to support youth-driven HEC initiatives.