

# BEEHIVE FENCE PROJECT



Lucy King, renowned Kenyan researcher, discovered a brilliant solution: A **Beehive Fence**, consisting of hanging beehives connected by wire. As elephants instinctively avoid the African Honeybee, farmlands enclosed by such a beehive fence will be spared.



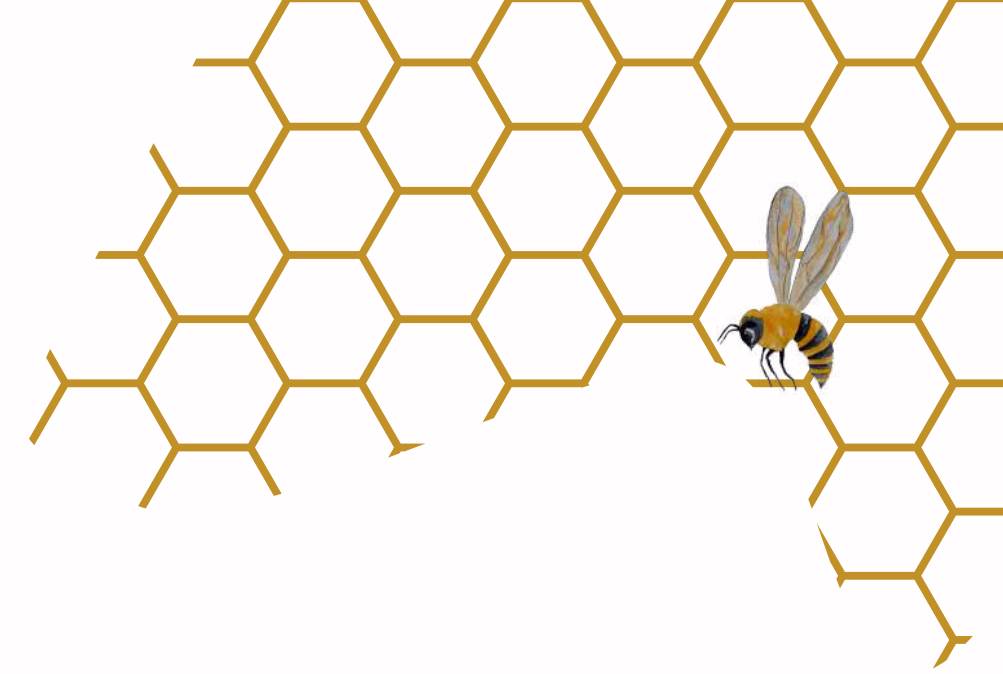
# Human-Elephant-Conflict



In many parts of the world where humans and elephants are neighbours, huge problems arise. **Elephants**, the biggest and heaviest land animals on earth, have the potential to cause a lot of damage to farmland.

Crops and fields are destroyed when elephants cross over them, and farmers often use violence to drive them away. The struggle for land sometimes even ends in death - either for humans or for elephants. This age-old conflict causes the farmers and villagers to hate the grey giants, whom they see as “destroyers” and “murderers”.

The willingness to become involved with poaching elephants thus grows, while an entire species becomes threatened by extinction. Such is the case in Tinga Tinga, where this project is to be executed.



# THE AIM

**The Beehive Fence Project** in the Maasai town of **Tinga Tinga** represents an innovative way of combining responsible tourism and nature/animal conservation with sustainably supporting a local community.

Including this project as an activity for guests who stay at **Shu'mata Camp** means they would directly be involved with working towards reducing the human-elephant conflict in the area and encouraging their peaceful co-existence in the long run.

# Win-Win-Situation

In her thesis, Lucy King developed a solution to this dilemma, which earned her the 2011 UNEP/CMS Thesis Award. Her discovery that **elephants instinctively avoid the African Honeybee** gave birth to the **Beehive Fence** concept. Consisting of hanging beehives hung eight meters apart and linked by wire, the fence repels elephants as follows:

**When an animal touches the fence (often at night), the resulting vibration of the wire alerts the bees in their hives. Their buzzing suffices to send the elephants off in a different direction.**

Moreover, elephants tend to avoid places in future where they have encountered danger before. Interestingly, the **Maasai already used beehives hung in trees to repel elephants in the past**. However, because they had no beekeeping suits they used to put burning branches in the hive to kill the bees or make the bees move out so that they can harvest the honey. Therefore the tree trunks they traditionally used for hives were unusable after the honey was harvested. The modern hives used in the **Beehive Fence Project** are Top Bar hives that consist of bars and have washable frames into which the bees construct the honeycombs. The project started with Jasmine Bee and the UWC school. The project of the UWC East Africa International School teaches school children about endangered animals and the importance of protecting them due to the role every species has in maintaining nature's equilibrium. This cooperation with the school and Jasmine Bee came to an end since. Through a metal-lined lid, the sun's heat is reflected, creating cooler air preferred by bees, which compared with traditional hives makes the hive-management easier, and reusable.

**The Beehive Fence Project** not only serves to effectively protect elephants from angry farmers and villagers and thus from Ivory poachers, it also symbolises a change from trading ivory to selling locally sourced honey for the people in Tinga Tinga. The **Maasai now have a new, sustainable source of income** from the Beehive Fence project, the roots of which stem from their own cultural history. The resulting peace between humans and elephants may create new perspectives for how these and other wild animals and their significance in the circle of life will be perceived.



# A One-of-a-kind Experience Creating Much More Than Just Memories

Gaining insight into the Beehive Fence project will create unforgettable impressions for our guests. Not only will they have a special activity to report to home about – they will have been **part of something meaningful**. Having cooperated with the Maasai, one of the world’s oldest tribes, and taken responsibility for their natural environment, the tourists will carry with them the feeling of having been involved in something bigger than merely being onlookers of a foreign culture and country.

They will have learnt that elephants, an endangered species, form a vital part of the vulnerable African ecosystem. By finding its way through thick bush, the elephant creates walkways for other animals to gain access to otherwise unreachable plants and areas. Trampling over high bushes enables grass to grow in previously shady spots. Furthermore, migrating elephants serve as nature’s plows, fertilisers and planters of seeds and nuts. They can even smell water and will dig water holes which benefit other creatures too. Through this collaborative project, various people will be reminded of the importance of the elephant: neighbouring villagers, tourists from all over the world and scholars - people who might be inspired to find new ways to help protect and save elephants in future.

By offering this as an activity, the numbers of hives along the **Beehive Fence** can potentially be doubled within a year, while the joy of your guests will be multiplied.



# THE PARTNERS

## VILLAGERS OF TINGA TINGA

As a team they are responsible for maintaining and cleaning the hives as well as harvesting the Honey which the bees have produced. This all happens under the watchful eye of our farming and honey harvesting expert Emmanuel, who is running workshops and passing on his knowledge and experience to the villagers, ensuring the overall safeguarding of this project.

## WILDLIFE MANAGEMENT AREA (WMA)

WMA was established in 2003 with land allocated by nine villages covering an area of 1,282 kilometres. WMA sets a good example for community-based projects, with their mission being to provide and involve local communities in both long-term health of wildlife and habitat along with rural economic development, where local Maasai pastoralists are benefiting from tourism and conservation initiatives.

## WWF

The WWF Tanzania under SOKNOT/BMZ are also a proud partner by providing funds to facilitate the construction and maintenance of the beehive fence as part of human-elephant conflict mitigation in Tinga Tinga Village, which is near the Enduimet Community Wildlife Management Area.



## CHAMÄLEON REISEN

(A German based Tour Agent) are huge supporters of the Beehive Fence Project. They are instrumental in promoting this activity to international guests as part of their Tanzania experience. As a result, this continues to generate much needed funds and awareness worldwide.

**Chamäleon**  
DIE REISE IHRES LEBENS.

## SHU'MATA CAMP

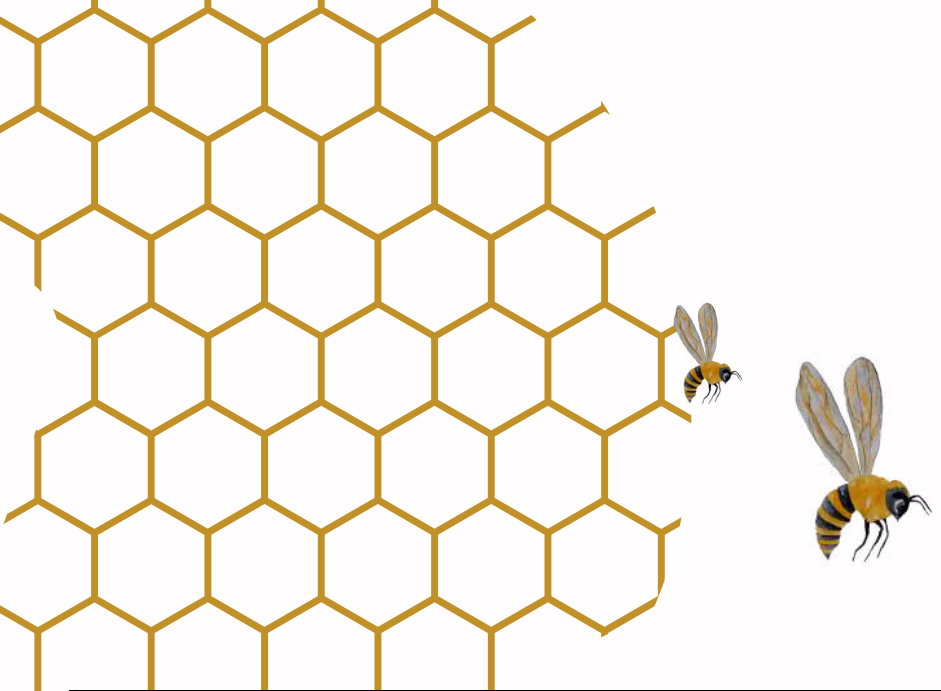
The project's fifth partner, representing the point of intersection between all collaborators, provides the opportunity for tourists to not only marvel at Tanzania's beauty, but rather to become actively involved in the country's development and protection of its natural environment.



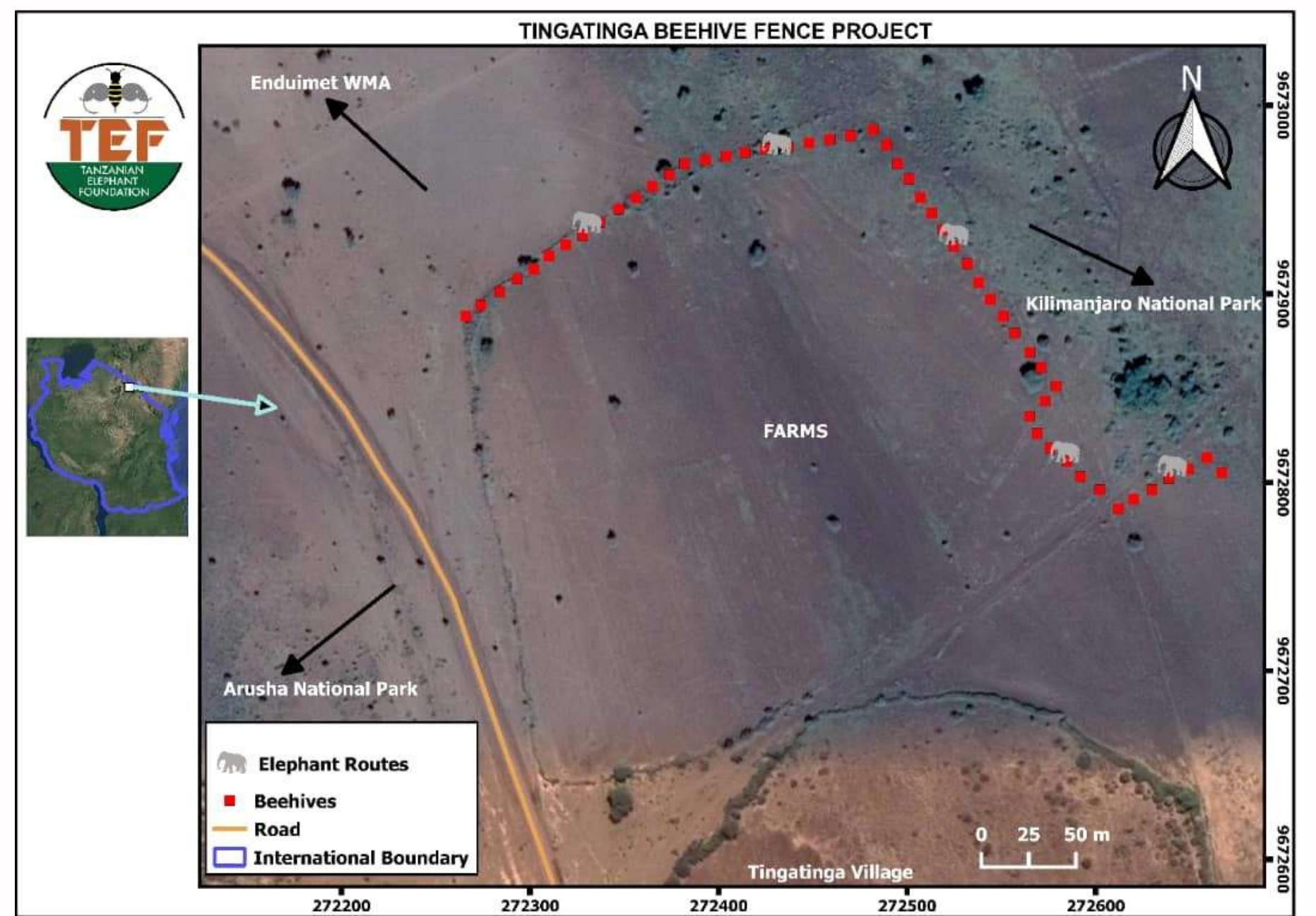
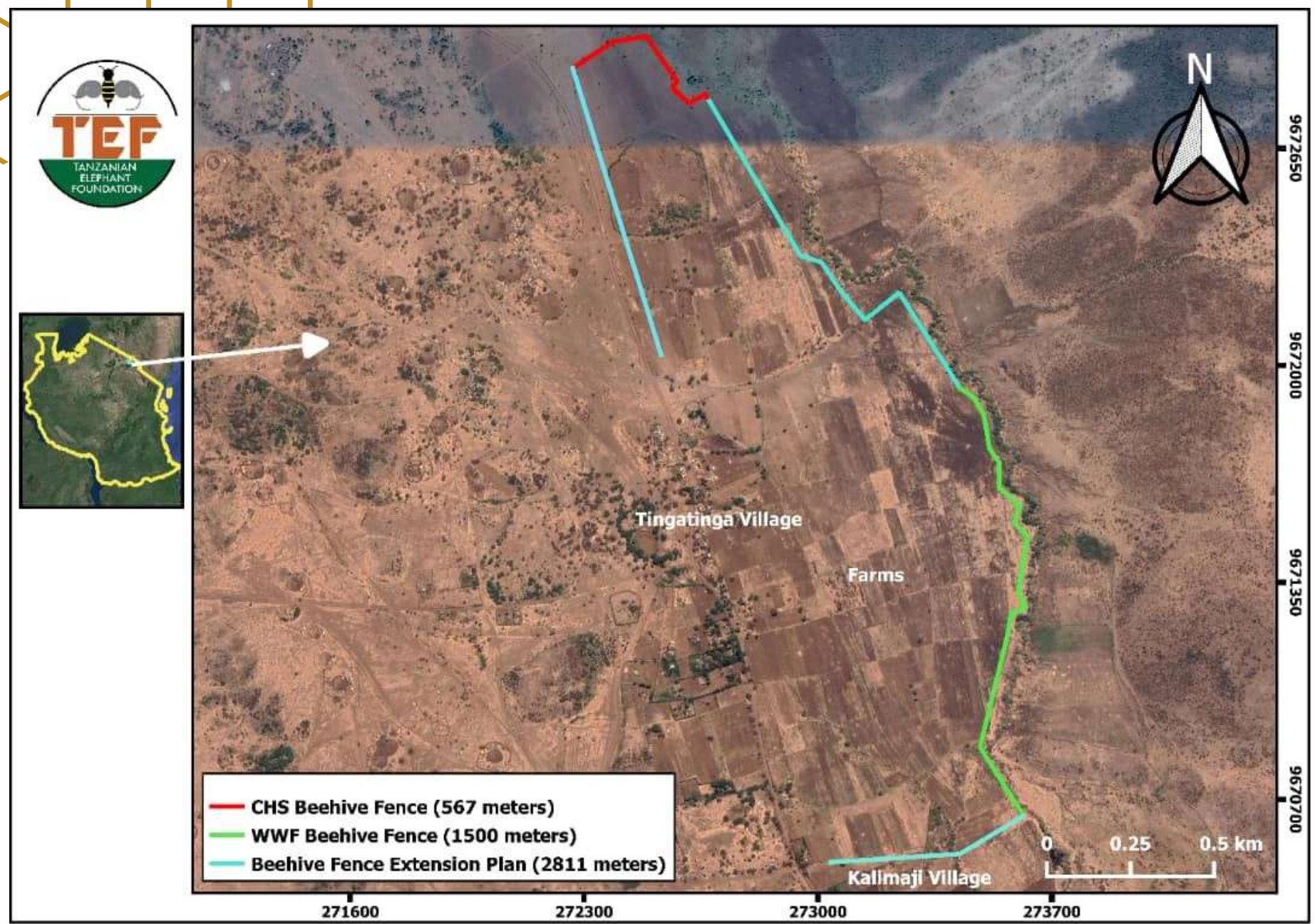
## TANZANIAN ELEPHANT FOUNDATION

The Tanzanian Elephant Foundation's vision is to be the premier organization in elephant conservation and human-elephant co-existence in Africa. They manage the fence and are also the main partner of Tinga Tinga Village.





# THE FENCE



# HOW CAN YOU HELP?



BOOK A STAY AT  
SHU'MATA CAMP



BOOK THE HALF-DAY ACTIVITY  
WHICH INCLUDES BUILDING UP A  
BEEHIVE, TALKING TO LOCAL  
MAASAI AND WITNESS AN  
AFRICAN SUNSET AT THE FOOT OF  
KILIMANJARO WHILE ENJOYING  
SNACKS & SUNDOWNERS



ACTIVELY PARTICIPATE IN SAVING  
THE ELEPHANTS AND SUPPORTING  
TINGA TINGA

**US\$ 133 DONATION PER GROUP  
FOR THE BEEHIVE**



# WHAT HAPPENS TO THE HONEY?



## HARVESTED

The honey are extracted by the local villagers of Tinga Tinga community.



## BOTTLED & SOLD

The honey are bottled and sold by the local Maasai people.



## INCOME

A new, sustainable source of income from the Beehive Fence project.




# Sustainability for the Future




## **CHANGE FROM PASTORALISM TO SELLING LOCALLY SOURCED HONEY**

Creating a sustainable source of income for the local Maasai. Additional income through the sale of 'Elephant-Friendly Honey' and bee products.





## **PROTECTING ELEPHANTS**

The Beehive Fence project protect elephants from angry farmers and villagers. Reduced invasive elephant crop raids that often cause trauma and injury to family members.



## **INCREASED YIELD PRODUCTION**

Increased yield production through both reduced damage and, potentially, increased bee pollination of crops.





## PARTING WORDS

Bees are vital for stable, healthy food supplies globally.

"Life without these insects would be a global disaster. Man would have only four years of life left. No more bees, no more pollination, no more plants, no more animals, no more man."

A EINSTEIN

