

# HUMAN-ELEPHANT CONFLICT HANDBOOK

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A Guide to Crop Protection from Elephant Raiding

**iied** International Institute  
for Environment  
and Development



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## HEALTH AND SAFETY WARNING!

A ranger's work is dangerous. Elephants can cause serious injury, and some of the HEC tools described in this book can also cause injury if not handled correctly. Please ensure appropriate care is taken when deciding to tackle elephants in the first place and when using these tools.

# INTRODUCTION

Elephants often damage crops, making it difficult for farmers to live peacefully with them. Communities must find ways to protect their crops while also preventing the killing of elephants, which are an endangered species.



In partnership with the Tanzania Wildlife Research Institute (TAWIRI), this handbook was created with input from communities living near conservation areas directly affected by wildlife conflicts on their farms and in their bomas. Over the past ten years, these communities have worked to prevent human-elephant conflict, gaining valuable experience and data. Each team's progress and effectiveness have been closely monitored, tracking the tools used from the Human-Elephant Conflict (HEC) Toolkit, including LED flashlights, air horns, noise balls, chili crackers, roman candles, and long-term prevention methods like chili fences and chili bricks.

This handbook explains human-elephant conflict and helps people understand elephant behavior. It gives practical advice, including safety guidelines for dealing with elephants, how to use the Human-Elephant Conflict (HEC) Toolkit, and tools like chili fences and chili bricks, which are useful in the field.

It also provides additional information on how to set up community HEC teams and the importance of collecting data on HEC incidents. This data helps wildlife and people live peacefully together by identifying patterns and causes of conflicts, leading to better conflict management.

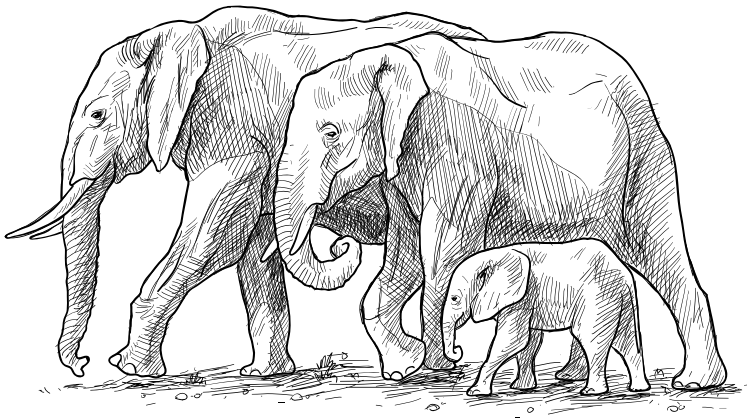
## Current HEC Problems

In northern Tanzania, farmers often have problems with elephants entering their farms. Elephants are attracted to crops such as maize because they are high in sugars and fats. This causes serious problems for farmers, who often fight back to protect their farms, harming both themselves and the elephants.



# A GUIDE TO ELEPHANT BEHAVIOR

Elephants form deep family bonds and live in tight matriarchal family groups of related females called a herd.



The herd is led by the oldest and often largest female, called a matriarch. Most herds have a few to a dozen elephants, but some can have up to 100, depending on the land and family size. Within these herds, elephants form strong, lifelong social bonds with family members and engage in various behaviors to maintain them, such as touching and caressing their trunks and making sounds.

Young male elephants leave their families around the age of 12-15 to live on their own or join other males. They may form bachelor herds, but there is often fighting for leadership, and weaker males usually leave to live alone. These fights rarely cause harm. Older bulls, much like female leaders, possess essential knowledge and help guide the group. However, male bonds are not as strong as those among females. Adult males experience musth, a phase where they become aggressive and search for females to mate with, releasing a strong smell from glands on their heads.

Elephants are highly social and talk to each other a lot. They use different sounds to communicate, like low rumbles that can travel far to signal water or guide the herd and loud trumpets to show excitement or danger. They also roar and grunt during play, bonding, or when upset. Elephants also use body language to express their feelings. Movements of their trunk, ears, and tail can show their emotions. By watching these signs, humans can better recognize their body language and predict their emotions and immediate behavior.

Elephants can travel as far as 80 kilometers daily to find food and water, sometimes moving to new areas at different times of the year to find food and water. They eat many types of plants, such as bark, roots, leaves, and fruit.

An elephant can eat up to 140 kilograms of food per day and drink 190 liters of water.

Elephants are extremely intelligent and can solve problems. They have been seen using branches to swat flies or scratch themselves. When young, elephants learn about migration paths, water sources, and survival skills from their mothers. As they grow, they learn new survival techniques and how to avoid dangerous areas or species. Elephants also show emotions like grief, joy, anger, and play.

Elephants have excellent memories and can connect experiences with places or things, making it possible to effectively train them to avoid certain areas like farms and villages, a method called aversion conditioning. This memory is especially helpful for matriarchs during dry seasons, as they can lead their herds over long distances to water holes they remember.

Strategies to reduce crop losses should recognize that most male elephants (bulls) rarely eat crops, so killing elephants will not solve the problem. Removing older bulls, which are more likely to raid crops, also harms elephant populations by removing key breeders and those with important survival knowledge. Non-lethal methods, supported by communities, are more effective and promote peaceful coexistence.

# Elephants: Big Brains, Big Memories

Elephants are very smart animals with great memory. Their brain is small compared to their huge body, but it weighs **6 kilograms - four times heavier than a human brain**.

Elephants can remember things for **up to 40 years**, which helps them keep important knowledge, like where to find water. This is why people say, “**Elephants never forget.**”

Their strong memory and intelligence also make them feel emotions like **pain, fear, and loneliness**. Like human families, they live in big family groups and stay close to each other.

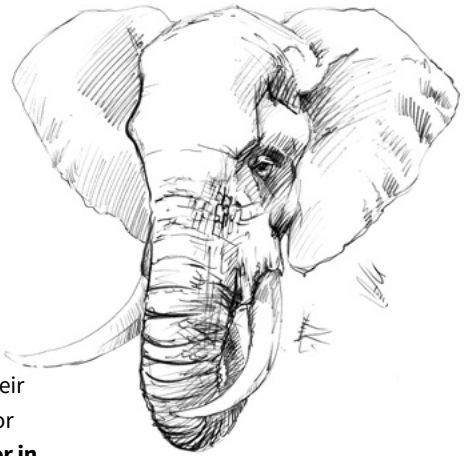
## Five Reasons Why Elephants Never Forget:

1	Big Brains	Elephants have very large brains, especially a part that helps them remember things and feel emotions.
2	Social Smarts	Elephants live in groups and must remember many other elephants, their relationships, and important social behaviors over many years.
3	Survival Memory	Elephants use their memory to survive by remembering where to find water, food, and the best paths to travel over long distances.
4	Emotional Memory	Elephants remember feelings, like recognizing friendly people or danger and even grieving lost family members, even after many years.
5	Long Lives	Elephants live up to 70 years, giving them time to learn and pass this knowledge to younger elephants.



# Senses of An Elephant

African elephants have strong senses that help them survive in the harsh environments of East Africa.



**Eyes:** Elephants do not see very well in daylight and can only see two colors: blue and yellow. Their eye position makes it hard to see things nearby or behind them, but **they can see better at night or in low light, noticing movement up to 45 meters away.**

**Ears:** In contrast, elephants have excellent hearing, which is important for survival. Their large ears allow them to hear a wide range of sounds, from high to very low. They can hear very low sounds that humans cannot. For example, thunderstorms create deep sound waves that we might only feel as vibrations, but elephants can hear them clearly. Low sounds can travel up to 4 kilometers, helping elephants talk to each other over long distances. **They can also feel vibrations through their feet, allowing them to sense things like rain from as far as 100 kilometers away.** Their good hearing helps them stay connected with their group, as they can recognize each other by their voices.

**Trunks:** Elephants have an incredible sense of smell, much stronger than humans or even dogs. To give you an idea, humans have about 5 million smell receptors in their noses, while dogs have over 200 million. Elephants, however, have far more than dogs, **making their sense of smell one of the strongest in the animal kingdom.** Researchers found that elephants can tell the amount of food in two bags just by smelling them, better than humans can by looking. Elephants use smell to locate food sources in the wild, allowing them to detect the sugar content within their feed. **They prefer foods with high sugar, such as fruit and maize, which they can smell from up to 19 kilometers away!** They also use their sense of smell to follow scent trails, recognize each other, and know their rank in the group.

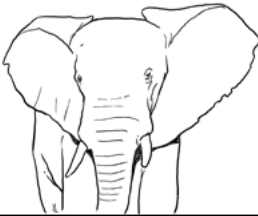
**Learning how elephants use their senses helps us protect them and address cases of human-elephant conflicts, ensuring their survival and coexistence with human populations.**



# Signs of Irritated Elephants

It is important to respect and understand elephants. Knowing how they behave can help you avoid dangerous situations. Elephants communicate very clearly and may try to send you signals—pay attention to these signs.

1



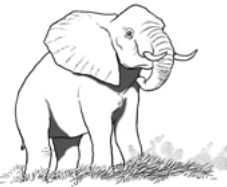
An elephant with its **head lowered and trunk down**, making a **rumbling or growling sound**, is warning you to stay away. This behavior often comes from a **family group protecting calves**.

2



An elephant with its **head lowered and trunk curled inward**, staying silent, is getting **ready to charge**. This is very dangerous and is often seen with **older bulls or lone elephants**.

3



An elephant with its **ears spread wide, and head raised high** shows **anger**. This behavior occurs if the elephant feels threatened, especially if humans or predators are nearby.

4



A **distressed elephant** might attack bushes and kick up dust, a sign of **frustration or warning**. This often happens in breeding herds or with males in musth.

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5



**Lone elephants**, like old bulls, usually stay in one place. While they are often calm, give them space—they can be unpredictable if provoked.

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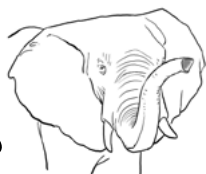
6



An **elephant shaking its head** may seem harmless but is often a sign of **irritation or annoyance**, especially when people are too close.

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7



If an **elephant raises its trunk**, it is **trying to smell** what is around it because it has not clearly seen or identified the threat. This means the elephant is alert - keep your distance.

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8



In **breeding herds**, female elephants are very protective of their calves. They will **defend their young fiercely**, so never approach them.

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9

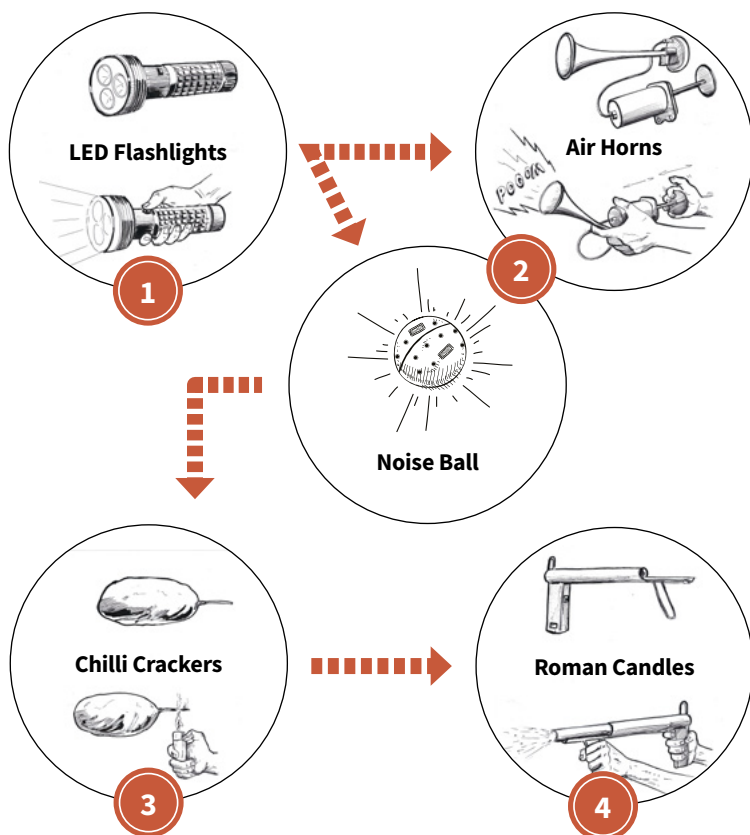


A male elephant in **musth** is highly aggressive. Look for **thick fluid dripping from its temples** and frequent urination. These elephants are extremely dangerous - stay far away.

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# THE HUMAN-ELEPHANT CONFLICT (HEC) TOOLKIT

A Human-Elephant Conflict (HEC) Toolkit has been developed using a step-by-step approach to prevent crop damage.



The HEC Toolkit aims to help elephants gradually respond to less aggressive methods, like flashlights and air horns. This reduces the need for more expensive and risky measures, such as Roman candles. All HEC incidents in project areas are monitored to improve and adapt the toolkit.

## It's all about Training!

Elephants are very smart animals. They have strong memories, can solve problems, and are good at noticing what is happening around them. This makes teaching them to avoid certain places, like farms, easier.

One way to do this is by teaching elephants to associate going into farms with bad experiences. For example, farmers can use chili fences, chili bricks, loud noises, or flashing lights. These things bother the elephants and make them want to stay away. A more direct approach is to use elephants' ability to notice patterns. For example, you can make them link bright lights, like a flashlight, with something stronger, like chilli bombs. By using these tools in a certain order, elephants learn that something unpleasant will follow when they see a flashlight or people. This makes them avoid those areas.

Elephants live in groups and learn from each other. If a few elephants in the group stay away from farms because of bad experiences, the rest will also learn to avoid those areas.

This training gives farmers a safe and lasting way to keep elephants away without hurting them. These methods change the elephants' behavior, helping people and elephants live peacefully together and reducing the need to chase them away all the time. Repeatedly and consistently using these methods teaches elephants to avoid certain areas. As a result, there is less damage to crops, and conflicts decrease. Using the elephants' natural intelligence, farmers can protect their farms and live in harmony with these amazing animals.

# What to Remember While Using the Toolkits

1. **Approach the elephants quietly**, avoiding any noise so they do not know you are coming. Do this until you are sure where the elephants are, how many of them there are, and assess the safety of the situation.
2. **Always start with the torch** to show them that you are there and give them the signal that they need to keep off. Keep at least 15-25 meters away when first using the torch.
3. If the elephant does not respond to the torch, **use the next tool**: the air horn or the noise ball.
4. Use the air horn to **make a loud sound and disturb the elephant**. If this does not work, **throw the noise ball** at the elephant and see if it moves away. If needed, you can also throw a **second** or **third** noise ball.
5. If the torch, air horn, and noise ball fail to turn the elephant, **use the chili cracker**.
6. The **Roman candle should only be used for aggressive bulls and family groups with young ones** who do not respond to all the other tools used before.
7. **Each tool in the toolkit should be assigned to a different person**. Avoid having one person handle the LED flashlight, air horn, noise ball and chili cracker all by themselves.
8. **Decide who will use the roman candle beforehand**, and always remember to aim directly at the elephants, not people. When using a roman candle in areas with dry grass, aim at a high point at least 10 meters above the ground to avoid starting a fire inside the farm.

## Step

# 1

## LED Flashlights



Most communities dealing with crop-raiding elephants and other wild animals use basic flashlights or lights to keep them away.

These lights may work with some animals but rarely with elephants. However, more powerful LED flashlights, such as NEBO flashlights, are now available in East Africa, and they offer a range of over 800 meters. These LED flashlights have proven effective when used by village crop protection teams or wildlife scouts to safely guide elephants away from farms.

Community volunteers can quickly learn to use LED flashlights with minimal training, making them more accessible and effective tools for mitigating human-elephant conflict (HEC).



### How to Use Them

The LED flashlights work best when set to flashing (strobe) mode and aimed directly at the elephants' eyes. They usually scare off elephants, especially the young ones and females.



### Where to Use Them

Used at the farm directly in front of the elephants (minimum safe distance of 15 meters).



### When to Use Them

Like all tools in the HEC Toolkit, high-powered LED flashlights are most effective when used to stop elephants before they enter a farm. If that does not work, they should be used immediately upon encountering elephants at night.

## Pros

- » Low-level intervention with proven success
- » Higher success with non-elephant crop raiders
- » Variable success with elephants, especially juveniles and females
- » Easily used by community member volunteers with minimal training
- » Easy to cover vast areas with volunteers and flashlights.

## Cons

- » Elephants might easily adapt to lights and not view them as deterrents
- » Some bull elephants have already shown to be undeterred by lights
- » Lights, if in the wrong hands, could be used for poaching
- » Year-round upkeep and maintenance of the lights is needed
- » Torches like these can be expensive, priced at around 120 USD each.
- » The availability of these torches is limited, making them difficult for communities to access.



### **Additional Considerations/Tips**

LED lights are currently donated to villages during the farming season. This enables communities to prevent human-elephant conflicts (HECs), maintain the tools, and store them safely during the off-season.



## Step

# 2



### a) Air Horn or b) Noise Ball

**In Step 2, two tools are available that serve the same purpose: the air horn and the noise ball. Either tool can be used interchangeably to achieve the desired outcome.**

## Air horn

The Air horn, which is usually available in East African countries for less than 20% of the cost of LED flashlights. They are easy to use, require little training for village teams and scouts, and have minimal risk. Air horns are commonly used as a secondary deterrent in elephant confrontations. They are often paired with flashlights, creating both a sound and light disturbance that scares elephants and other animals.



### How to Use Them

Air horns work best when used with LED flashlights. They create a sound and light disturbance that irritates elephants and other animals. The horn makes a loud, continuous noise that disrupts the elephant's hearing. To use it, the person should press the horn repeatedly, aiming directly at the elephant.



### Where to Use Them

At farms, during an encounter with crop-raiding animals.



### When to Use Them

It works best when used with LED flashing (strobe) lights.

## Pros

- » Inexpensive at about \$20 per horn
- » Requires minimal training to use, thus easily adopted by communities
- » Success in deterring elephants proven, especially when used together with lights

## Cons

- » Elephants can easily adapt to the air horn and not be deterred



### Additional Considerations/Tips

The best approach is to use LED flashlights and air horns together. Teams have successfully used them hundreds of times to deter elephants and other wildlife that raid crops.



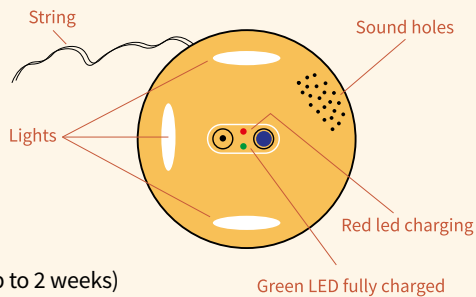
## Noise Ball

The Noise Ball is an alternative tool in the toolkit for Step 2. It is designed to safely keep elephants away from farms. The ball uses sound and flashing lights to exploit elephants' sharp hearing and sight.

It uses sound and light to exploit elephants' sharp hearing and sight. The noise confuses their hearing, while the light grabs their attention, making it an effective and humane way to protect crops.

### Components of the Noise ball

- » Ball
- » Siren
- » String
- » Lights
- » Switch
- » Charging port
- » LED warning lights
- » Rechargeable batteries (last up to 2 weeks)
- » Indicator light showing full or low battery



### How to Use Them

- » Make sure your team has at least four people.
- » Carry at least four noise balls, so each pair of people has two.
- » One person should have a bright torch to spot the elephants.
- » Throw a noise ball to distract the elephant. After the first throw, toss another in a different direction to keep the elephant's focus away from you.
- » If the elephant moves toward you, throw a noise ball at it and quickly move away.



## Where to Use Them

- » In areas where elephants are approaching or might raid crops or farms.
- » In open spaces where the noise ball's sound can be heard clearly.



## When to Use Them

- » When elephants are seen approaching or near crops.
- » When other methods like lights or air horns are unavailable or not working.

## Pros

- » Easy to use with little training.
- » Safe and non-lethal for deterring elephants and other wildlife.
- » Can work well with other tools like lights or air horns.
- » Lightweight and easy to carry.
- » Safer to use from over 20 meters away, so you do not have to get too close to the elephant.

## Cons

- » May not work well if the elephant is very close or focused on crops.
- » Needs several people to use effectively.
- » Less effective if used alone without other tools.
- » Battery may not last long, which weakens the sound and reduces its ability to scare elephants.



## Additional Considerations/Tips

Stay quiet and maintain a safe distance of at least 15 meters from the elephant. Avoid shouting or running while holding the noise ball, as this could attract the elephant's attention. Using multiple noise balls improves the chances of successfully deterring the elephant.

## Step

# 3

## Chili Crackers



Chili crackers use sound to scare elephants, chili powder to irritate them, and their strong smell also irritates the elephant's trunk.

Chili crackers were extensively tested over four years in the Randilen Wildlife Management Area (WMA) by TAWIRI before being approved as an effective tool for deterring elephants and mitigating human-elephant conflicts (HEC). The community put in significant effort to implement this solution, using over 500 chili crackers in Randilen WMA alone, with hundreds more deployed in other WMAs.

Chili crackers are the most commonly used deterrents and are generally effective. However, over time, some male elephants have become less affected by them and refuse to leave maize fields.



### How to Use Them

Chili crackers are made by wrapping chili powder and a firecracker in a condom. They are lit and thrown above the elephants, taking the wind direction into account. The loud noise and the irritation from the chili powder work together to scare the elephants away.



### Where to Use Them

Chili crackers are the best way to prevent elephants and other animals from entering farms or to drive them away if they are already inside.



### When to Use Them

Use chili crackers if the lights, air horns, and noise ball have not worked. It is best to throw multiple crackers in a row, as one cracker is usually not enough to drive an elephant herd off the farm.

## Pros

- » This method combines two effective deterrents - chili powder and firecrackers - into one.
- » They effectively drive away elephant herds when used in quick succession.

## Cons

- » Can be dangerous if used incorrectly, as it might explode in the user's hands.
- » Some male elephants return to the farm soon after being chased away.
- » Requires advanced training to use safely and correctly.
- » Expensive for local communities to afford.



### Additional Considerations/Tips

Chili crackers are an affordable, mid-level deterrent that community teams can easily use.



## Step

# 4

## Roman Candles



As a last resort, a modified roman candle firework is shot 10-60 meters into the air.

The fireworks create loud explosions and bright flashes. Like other tools in the HEC Toolkit, they are used to scare elephants away.



### How to Use Them

Roman candles should only be used as a last resort when male elephants refuse to leave a farm after all other methods have been tried or if they return shortly after being chased away. Trained wildlife scouts are the best to handle this tool because it is riskier and requires more skill.



### Where to Use Them

Roman candles should only be used where male elephants refuse to leave a farm after all other methods have failed or if they keep coming back.



### When to Use Them

Use them only after all other tools in the HEC Toolkit have been tried.

## Pros

- » Proven to be extremely effective, even for chasing off aggressive bull elephants.
- » Elephants rarely return to the farm the same night after intervention is used.

## Cons

- » Expensive, costing about \$30 per explosive
- » Higher risk due to larger explosions, requiring advanced training.
- » Currently available from only two suppliers in Arusha, Tanzania

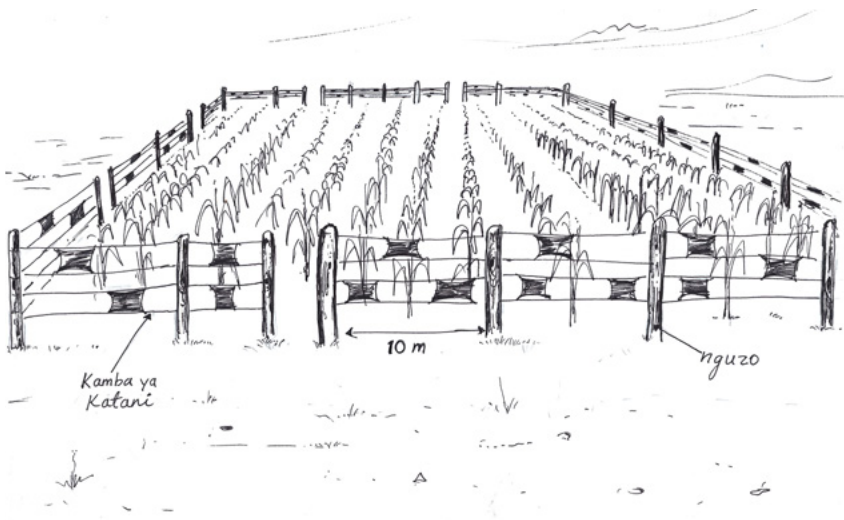


# Frequency and percentage of toolkit effectiveness during testing.

	Failed	Successful Usage	Total Usage	% Failure	% Success
LED Flashlights	81	283	364	22%	78%
Air Horn	74	43	117	63%	37%
Noise Ball	4	87	91	4.4%	95.6%.
Chili Cracker	22	77	99	22%	78%
Roman Candles	0	23	23	0%	100%
Total	181	513	694		

# FURTHER STRATEGIES

## Chili Fence and Chili Bricks



In the past, different types of fences, like beehive fences, have been tried. However, they are expensive to build and hard to maintain because they need large poles and bees, which are difficult to manage on a large scale. Chili fences are a cheaper and easier option. Elephants do not like the smell of chili, so chili fences and chili bricks work day and night to keep elephants away. These fences block elephant paths and guide them away from farms by making them follow the fence instead of entering the fields.

### How to Build Them

Chili fences are simple to set up and require little material. They are only used during the peak harvest season, not all year round. The fence is made using sisal ropes, poles, cloth rags, used motor oil, chili powder, and basic tools. It must be built and maintained properly at the right time to work well. The best time to set up the fence is when crops are ripe or almost ready to harvest, about 4-6 weeks before harvesting.

## Chili Fence Instructions

The following steps are a simplified version of the process.

- 1. Dig Holes for Poles:** Dig holes so the supporting poles are spaced 7-10 meters apart.



- 2. Prepare the Chili Mixture:** Grind chili into fine particles and mix 8-10 kg of chili powder with 10 liters of used engine oil.



- 3. Cut and Tie Cotton Sheets:** Cut cotton sheets into 15x10 cm pieces. Tie each corner of the sheets to sisal ropes.



- 4. Soak Sheets and Ropes:** Soak the cotton sheets and sisal ropes in the chili oil mixture until fully saturated.



5.

**Build the Fence:** Tie the sisal ropes tightly to the poles, leaving just one opening as an entrance.



6.

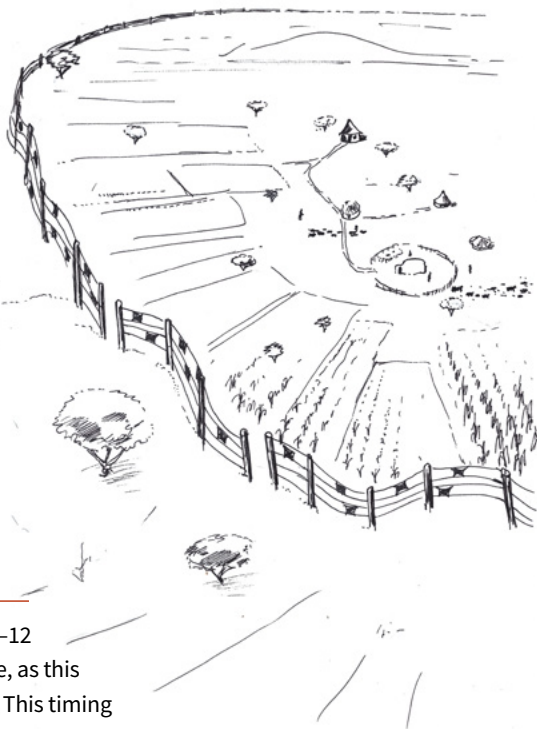
**Place Cotton Sheets:** Place about three saturated cotton sheets between each pole, making sure the sheets cover the entire farm boundary.



For very long fences, add openings every kilometer and set up watchtowers at these points to monitor and guide elephants. These openings allow elephants inside the fields to leave without damaging the fence, and the HEC team can use them to safely guide elephants out.

## Where to Build a Chili Fence

- 1. Identify Elephant Paths:** Locate the trails, corridors, and pathways elephants use to enter the farm.
- 2. Plan the Layout:** Align the fence with the farm layout to reduce setup costs.
- 3. Maintain the Fence Regularly:** Check the fence every 7 days during the rainy season and every 14 days in dry weather. Regular maintenance keeps the fence working well and extends its lifespan.
- 4. Timing of Installation:** Build the fence 6–12 weeks before harvest when crops are ripe, as this is when elephants are most likely to raid. This timing prevents elephants from getting used to the fence and reduces maintenance costs.
- 5. Refreshing the Fence:** The chili smell fades over time, so reapply the chili oil mixture to the sisal ropes and cloth every 14 days in dry weather and every 7 days in rainy weather.
- 6. Assign Responsibility:** Farmers or villagers should appoint someone to check the fence daily for damage, such as broken strings or fallen poles, and fix issues immediately.
- 7. Ensure Ripe Crops:** The fence crops should mature enough to attract elephants.



## Pros

- » Effective during peak elephant-raiding times.
- » Easy to construct with basic materials.
- » Requires modest maintenance.
- » Can be adapted for other human-elephant conflict (HEC) strategies.
- » Relies on community participation but does not need advanced skills.



## Cons

- » Cannot stop all animals from raiding.
- » Wooden poles can be expensive for some communities.
- » Raiding can occur any time during the growing season, not just at harvest.
- » Used rags with motor oil are often not disposed of properly.
- » Does not produce a sellable byproduct like other chili-based programs.

## The Chili Brick

Chili powder can make chili bricks that produce smoke to keep elephants away from crops at night.



## To make chili bricks

1. Mix wet cattle dung with chili powder.
2. Shape the mixture into bricks.
3. Dry the bricks in the sun for 2 to 4 days.

### Once the bricks are dry

- » Place them along elephant paths near the chili fence.
- » Light them to create chili smoke, which helps deter elephants.

## Building Community HEC Teams

Community Human-Elephant Conflict (HEC) teams are created with support from the Wildlife Management Area (WMA) team and village leaders. The village identifies areas where human-elephant conflicts are most severe. Meanwhile, the WMA team gathers data on the animals causing the most crop damage and the locations with high animal activity. Based on this information, they determine how many teams are needed to protect the farmlands.

Once the groundwork is complete, the HEC team develops a plan, trains team members, provides them with the required equipment, and monitors their progress. These teams play a crucial role in the villages, helping to reduce damage to crops and property while improving community safety.

### Process Used to Establish New HEC Team

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1. Submit an official request for Human-Elephant Conflict (HEC) mitigation support.

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2. Secure funding to carry out the project.

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3. Conduct an initial survey to assess the HEC situation.

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4. Develop a detailed plan for project implementation.

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5. Purchase HEC prevention equipment (toolkits).

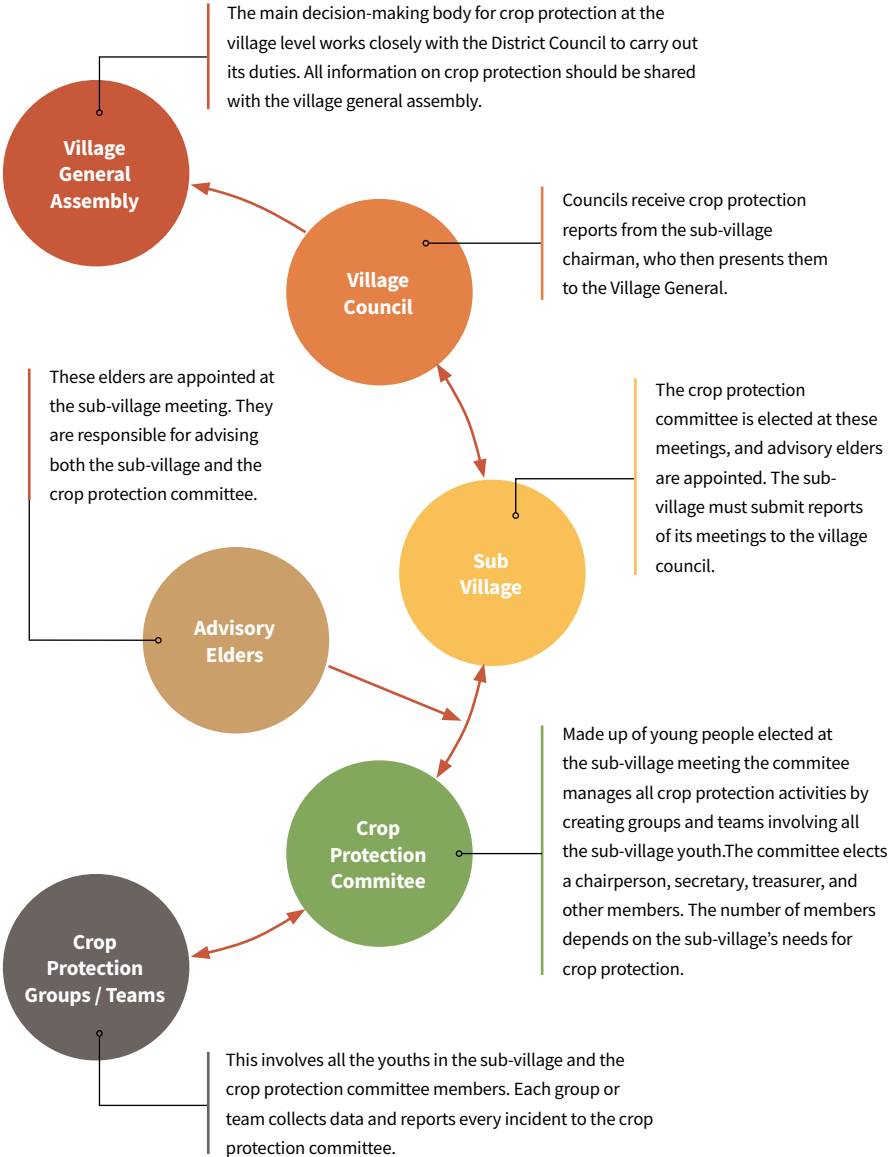
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6. Set up and train a community team to manage HEC prevention efforts.

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7. Distribute the HEC prevention toolkits to the community team.

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# Community Group Structure of Crop Protection in Villages and Sub-Villages



# DATA COLLECTION

## Monitoring Crop-Raiding Incidents

Recording every crop-raiding incident is important to track the success of crop protection and improve tools and techniques. This includes incidents where elephants are stopped from entering farms or chased away. The village crop protection (VCP) team leader collects this information and writes it down in a simple data sheet or notebook.

Each morning, a HEC field monitoring officer reviews all crop-raiding incidents from the previous night. The officer enters the details into a special Crop Raids data form using the KoboCollect app, which can be installed on smartphones. The data collected includes:

- » **GPS location of the incident**
- » **The village team involved**
- » **The species of crop-raiding animals and their estimated numbers**
- » **Photos of any damage caused**
- » **The methods and sequence used to scare away the animals**

## How Collecting HEC Data Helps

- » Data helps make decisions based on facts, not guesses, to improve efforts.
- » It shows areas with the most incidents, making it easier to choose the best methods to use.
- » Data helps check how well the toolkits and strategies are working.
- » It identifies which animals are causing damage, how often they raid, and the best way to respond.
- » Photos provide clear evidence of the level of damage caused.

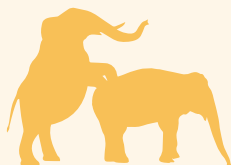
# ELEPHANT SAFETY GUIDELINES



These guidelines will help you stay safe during an encounter with an elephant.



Solitary elephants bulls can be very aggressive.



Avoid elephants during mating season.



Beware when elephants trumpet or make a lot of noise.



Never use dogs while guiding elephants out of farms or fields.



Avoid all-male bachelor herds and keep a safe distance from them.



Keep a minimum distance of 10-15 meters when first using a torch to find an elephant at night.



Avoid making any noise until you know where the elephants are.



Never get behind the young elephants, as this will anger the adults.



Do not drink alcohol while guiding elephants from farms.