



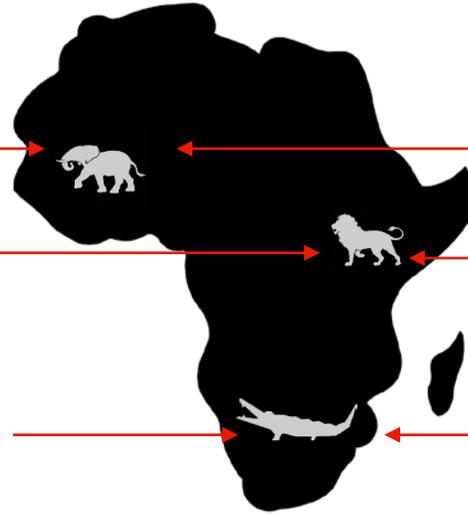
## Why is this issue important?

### Effects on People

Estimated to be responsible for **80-90% of crop raiding** in parts of Ghana <sup>1</sup>

Found responsible for **86% of attacks on domestic animals** in parts of Kenya over a four-year period <sup>1</sup>

The crocodile is the animal responsible for **most human deaths in Africa** <sup>1</sup>



### Effects on Animals

Kenyan Wildlife Authorities shoot **between 50-120 elephants** each year <sup>1</sup>

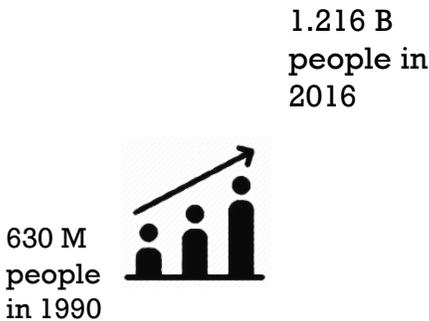
**27 out of 40 lions speared** in a Kenyan park in 2003 by pastoralists <sup>1</sup>

In general, more crocodiles are **killed in retaliation** than the number of people attacked <sup>1</sup>

Human-wildlife conflict is one of the most **critical** and **widespread** issues facing wildlife conservation in Africa. Reducing this conflict is therefore vital. Many measures are undertaken to reduce this conflict, but often prove **ineffective** or **ethically inappropriate** for the animals. Mitigation and management strategies that take into account the **welfare** of both the **people** and the **animals** should be most considered.

## MAIN CAUSES

### Population Growth



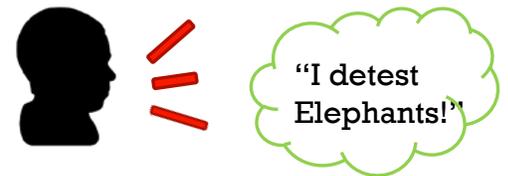
Exerts pressure for land and encroachment into wildlife habitats <sup>1</sup>

### Wildlife Habitat Loss



Transformation of forests and savanna grasslands into urban agglomerates/ agrarian areas greatly decreases wildlife habitats <sup>1</sup>

### Human Attitudes and Perceptions



Communities near protected areas have little sympathy for wildlife, as they consider them a threat to their safety and food security <sup>1,6</sup>



# Mitigation Measures and their Drawbacks

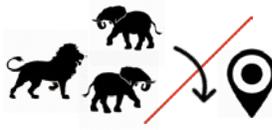
## Lethal Control



### *Killing of problem animals*

- Widely used with the purpose of maintaining social peace <sup>1,3</sup>
- Lethal control has raised ethical concerns on the killing, poisoning and hunting of wild animals globally, placing increasing constraints on wildlife management options <sup>2</sup>

## Translocation



### *Relocating animals*

- Many translocated animals return to the original site and a proportion die due to stress of capture/release
- Increased risk of spread of disease to other animals and/people.
- This method is extremely expensive and dangerous to carry out <sup>1,3,4</sup>

## Fertility Control



- Contraceptive vaccines and chemical castration have been explored but without much success <sup>1,3</sup>
- Ethical concerns pertain to its effects on physiology and behavior in the short-term and long-term, as well as the deprivation to display parental behavior in nurturing species <sup>5</sup>

## Deterrents



Most deterrent techniques, whether visual, acoustic, olfactory or contact, have shown to be ineffective in the long term, and some such as throwing rocks may require close contact with wild animals making them risky <sup>1,7</sup>

## Human/animal Guards



The fear of human guards normally dissuades animals from causing damage, however some species show less fear than others, and this poses a danger for humans and guard animals <sup>1,6,7</sup>

## Fencing



Though widely used, fencing reserves may pose a potential animal welfare risk by affecting the dynamics of wildlife populations and hindering their natural migratory and dispersal behavior, especially in the case of highly territorial species such as lions <sup>1,3</sup>

## Recommendations:

### Environmental Management

#### Protecting natural prey



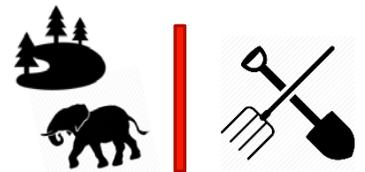
Achieved by preventing poaching or commercial harvest of natural prey. Protection of prey disincentivizes wild animals from attacking domestic animals <sup>1,7</sup>

#### Providing alternative water sources



While providing food alternatives for herbivorous animals may not be economically applicable in Africa, alternative water sources may reduce sources of conflict with people and animals' use of human areas <sup>1,7</sup>

#### Land-use planning



Designing areas suitable for human activities such as agriculture and areas exclusively for wildlife. Also, encouraging the growing of unpalatable crops around the protected area boundary may make such lands less attractive to animals <sup>1,3,7</sup>

# Recommendations:

## Human Management

### Relocating Communities from protected areas



Though costly, providing people with better resources and safer alternatives may alleviate the pressure on wildlife habitats in the long-term and also benefit the people by delivering higher profits in terms of food production, and lowering property risks <sup>1</sup>

### Creating Community Awareness



Continuing to educate people on the importance of wildlife conservation may significantly change the attitudes that people have towards animals, therefore increasing sympathy and tolerance towards them <sup>1,3,6,7</sup>

## References:

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