"Human / Wildlife Conflict Mitigation Strategies in the GLTFCA Context"
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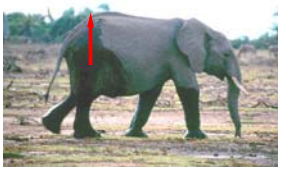
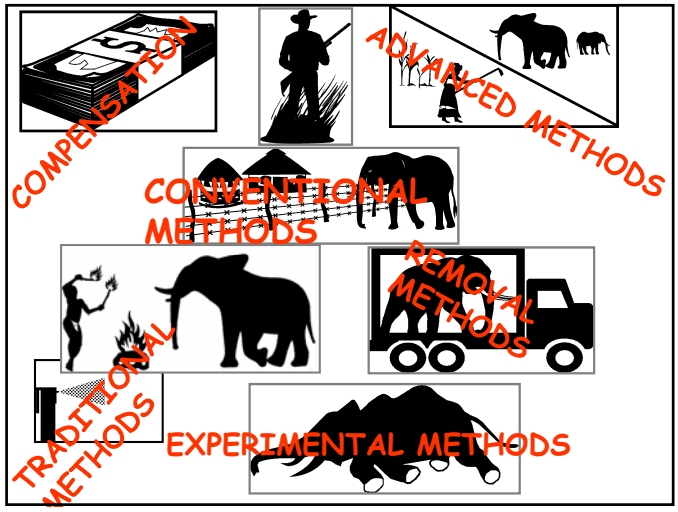
The Problem

MITIGATION METHODS IN USE



Traditional deterrent methods

- Fire
- Watchmen
- Noise-making
- Missiles thrown at wildlife
- Cleared areas around fields
- Sharp objects on wildlife pathways
- Low cost barriers
- Poison decoy foods
- Traps

Lessons Learned:

- Relatively cheap, can be applied by the local communities themselves, and usually not fatal to the wildlife
- However, most wildlife esp. elephants habituate quickly to any given method and learn to ignore or avoid it
- **High risk and no backup**
- **Labour intensive**
- **Some are illegal**

CONVENTIONAL DETERRENTS

- Weapons fired near raiding wildlife mainly elephants
- Thunder flashes
- Flares
- Trip wire alarms

Lessons Learned:

- Habituation is a problem
- Can be dangerous due to the proximity of wild animals e.g. buffalos, elephants, lions, etc
- Must be applied by trained personnel
- Can be costly

Killing problem animals (Lethal control)

- Killing of individual problem animals mostly by management authorities
- Commercial trophy hunts targeting problem animals
- Depopulation of wildlife (culling or eliminating the entire wildlife sub-population)

Lessons learned:

- A relatively cheap and quick control method but skill dependent
- Can provide value (meat, skins, ivory) to local populations
- May be difficult to identify culprit animals with certainty or predict their movements
- Long-term effectiveness questioned
- Often involves sensitive political decisions at national level
- Influenced by external pressure at national and international levels

Translocation and Game Drives

- Removing individual problem animals
- Removing the entire sub-population
- "Driving" prides/herds/packs etc away from human settlement into protected areas

Lessons Learned:

- May not work if only individual animals are moved (difficulties with identifying culprits)
- Short term and may introduce or transfer problem
- Expensive, dangerous and complicated – needs expert staff and specialized equipment
- Potentially highly disruptive to animal social dynamics
- Has to be carefully planned in national/regional context as it can transfer problem elsewhere

Physical Barriers

- Simple fencing
- Conventional fencing
- Electric fencing
- Stone walls
- Buffer crops

Lessons Learned:

- Sustainability dependent on maintenance by affected communities
- Can be resource and/or labour intensive
- Lack of local community support can exacerbate HWC (fencing often used as snares)
- May not be repositioned once installed
- Often fail because of poor design and layout
- **Displaces the problem to other areas**
- **Tend to deter only specific species (Elephants learn to break through, primates can climb over, etc)**
- Create straight edges

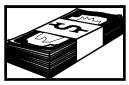
Repellents and Acoustic

- Olfactory repellents
  - Capsicum
  - Tobacco
  - Rubber
  - Dung
- Broadcasting wildlife alarm calls e.g. elephant or lion
- Reproduction cycle manipulation

Lessons Learned:

- Some olfactory repellents effective e.g. chilli smoke on elephants but difficulties with finding practical delivery mechanisms for chilli, tobacco sprays and smoke
- Broadcasting lion or elephant alarm calls requires expensive technology and may lead to habituation
- Ethical considerations on artificial birth controls
- Costly

Compensation and Insurance



- Monetary - payments linked to wildlife damage
- Non-monetary (e.g. food relief linked to wildlife depredations)
- Insurance schemes with contributions and claims

Lessons Learned:

- Locally-based, self-insurance schemes can have potential if damage levels (thus insurance claims) are fairly low and damage is randomly distributed
- Monetary self-insurance may be an option in wealthy private landholdings
- National-level monetary compensation is costly and generally open to abuse and mismanagement
- Food relief is often not sustainable and is reliant on government and/or external support

Wildlife utilisation: Returning Benefits to Local People

- Non-consumptive use of wildlife
  - International tourism
  - Sale of live animals
  - Domestic tourism

- Consumptive use of wildlife
  - Trophy hunting safaris
  - Sale of wildlife products (eggs, ivory, meat, bones and hides)
- Management of problem animals
  - Meat (venison) from animals shot on problem animal control

Lessons Learned:

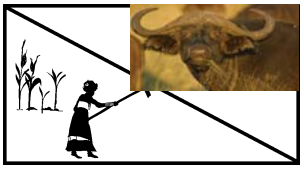
- Can help increase tolerance of problem animals in the long-term
- Can encourage positive changes in land use

However:

- Requires complex, long-term partnerships between wildlife authorities, local authorities, the private sector and local citizens
- Benefits accrued must go to those directly affected – often difficult to achieve
- Requires clear user/tenure rights and policies formulated at national level
- May be restricted by international pressure or agreements (e.g CITES)

Advanced Mitigation: Land-use planning

- Modification of human settlement patterns and activities
- Modification of cropping and animal husbandry regimes
- Modification of existing protected areas and creation of new protected areas
- Modification of land use to create or secure wildlife movement routes/corridors



Lessons learned:

- Can be encouraged, implemented, monitored and evaluated entirely at the local level through dialogue and consultation
- But only possible in a policy environment with some legitimate, enabled form of local participation in wildlife management
- Long-term as communities need time to implement land use plan

Lessons learned……..cont

- Devolving responsibility to different local stakeholders helps to combat HWC more effectively
- More sustainable in the long term than relying on local wildlife authority to "take care of the problem"

Common Shortcomings

- Tend to believe that:
- HWC can be *eliminated* through the right counter measures
- "One size fits all"
- The intensity of HWC is directly proportional to the size of the animal population
- Elephants are the most serious pest species (perceptions)

Conclusion?

- No “blueprints” nor “silver bullets” for mitigation – need complete tool box
- One intervention alone will never ameliorate HWC
- Need to address the problem at all levels – symptoms and underlying causes
- Need to study more thoroughly and respond more directly to the human dimension of HWC
- Successful long-term management of HWC requires solid support from all levels of government
- Long-term management of HWC requires (This must be supported by) clear policies and legal frameworks at the local, district and national/regional levels
- Conflict mitigation must have strong local participation and be integrated with other wildlife and land management activities

Conflict Resolution Committees - Sharing responsibility for managing HWC

- Local committees comprised of affected communities, relevant CBCs, NGOs, wildlife authorities and private sector, etc. who share responsibility for dealing with HWC