

Little Africa in India

Living with large carnivores in Panna Tiger Reserve (India)



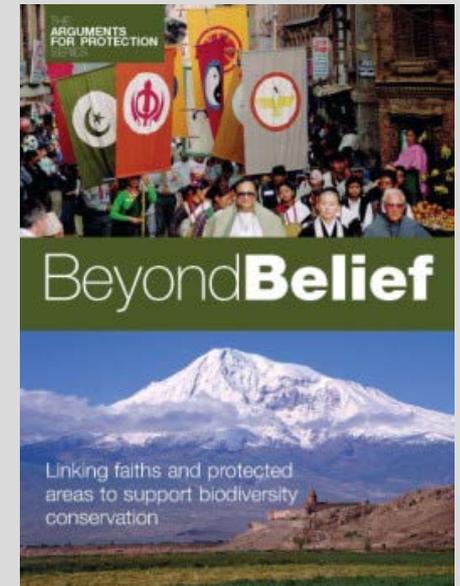
Shekhar Kolipaka and Gerard Persoon

Institute Cultural Anthropology and Development Sociology

Leiden University

Human-wildlife conflicts: retaliatory killing of carnivores which prey on livestock

- Deliberate killing, snares, poison, etc.
- Killing lions as symbol of manhood
- Little reference to religion-based conservation



The African Experience

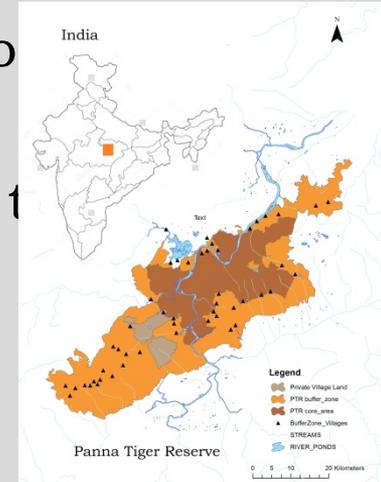
Solutions for wildlife conflicts

- Fences - Limiting distribution
- Fines - Penalties for deliberate killing
- Carnivore trophy hunting - lethal control- limiting numbers
- Changing land use/agricultural practices
- Translocations / re-introductions
- Public participation, education and awareness raising
- Compensation or consolation payments
- Location specific innovations – blinking lights against lions or bee boxes for elephants



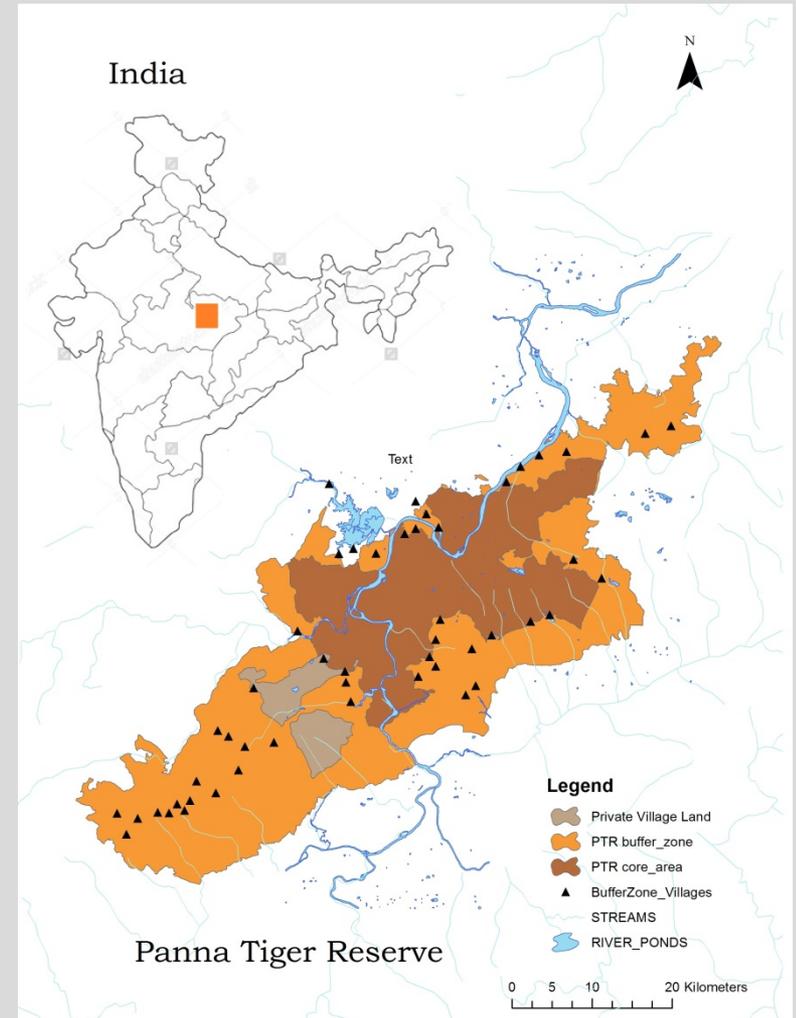
A case from Panna Tiger Reserve (India)

- A unique case of low retaliation on carnivores by local people
- This study is a part-investigation of a larger study that asks questions “whether large carnivores like tigers can coexist in multiple use forests of the Indian subcontinent.”



Panna Tiger Reserve Buffer Zone

Area of buffer zone:	1400 km ²
Vegetation type:	Dry deciduous
Villages inside buffer:	42
People:	42,650
Livestock :	45,000 (cows, buffalos, goats)
Ethnic and Caste groups:	31
Major people groups:	Gond tribes, Yadav pastoralist
Religions practiced:	Tribal religions, Hindu, Muslim



Area in yellow is the buffer zone of PTR

Introduction

People and wildlife have always co-occurred in the Panna region.

Large carnivores are widely distributed in the region.



Attacks on livestock are frequent

- Over 1000 cases in 2013-2014
- Nearly 200 cases in which compensation was paid



However, incidents of **retaliation** on carnivores by local people are **not recorded**

Why?

Major carnivores in the area



The study

Aim

To develop understanding on the effectiveness of traditional livestock practices to deter carnivores

- Objectives of the study**
1. To examine local peoples livestock management practices.
and
 2. To examine if some cultural basis for tolerance exists
also to develop understanding on why people do not retaliate on carnivores in spite of frequent predation incidents.

Key Findings: People's practices provided carnivores ready food

Cattle carcasses (2700 annually)

Feral cattle and unwanted cattle roamed free in the forests.

Livestock kept for livelihoods were well maintained. But livestock kept for sustenance poorly herded.

Wild prey were active near villages

Cows comprised nearly 52% of all kills made by tiger.

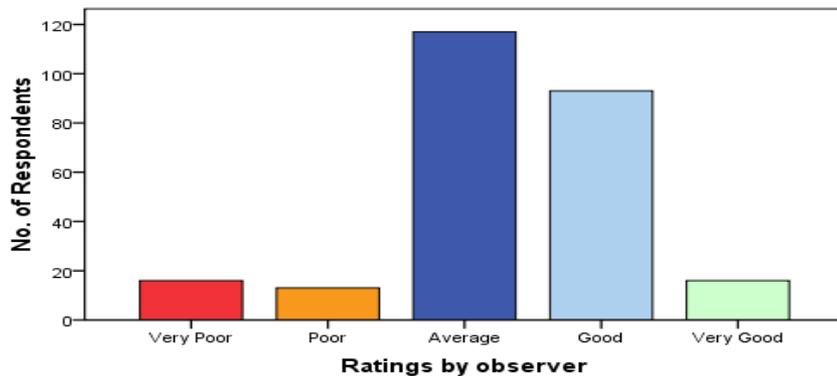


Key Findings: Fencing was mostly against crop raiding animals

1. Predator proof corrals were mostly for goats.
2. Predation near corrals was not common. 3 cases in 2013.
3. Most predation occurred in the forest



Corral Status

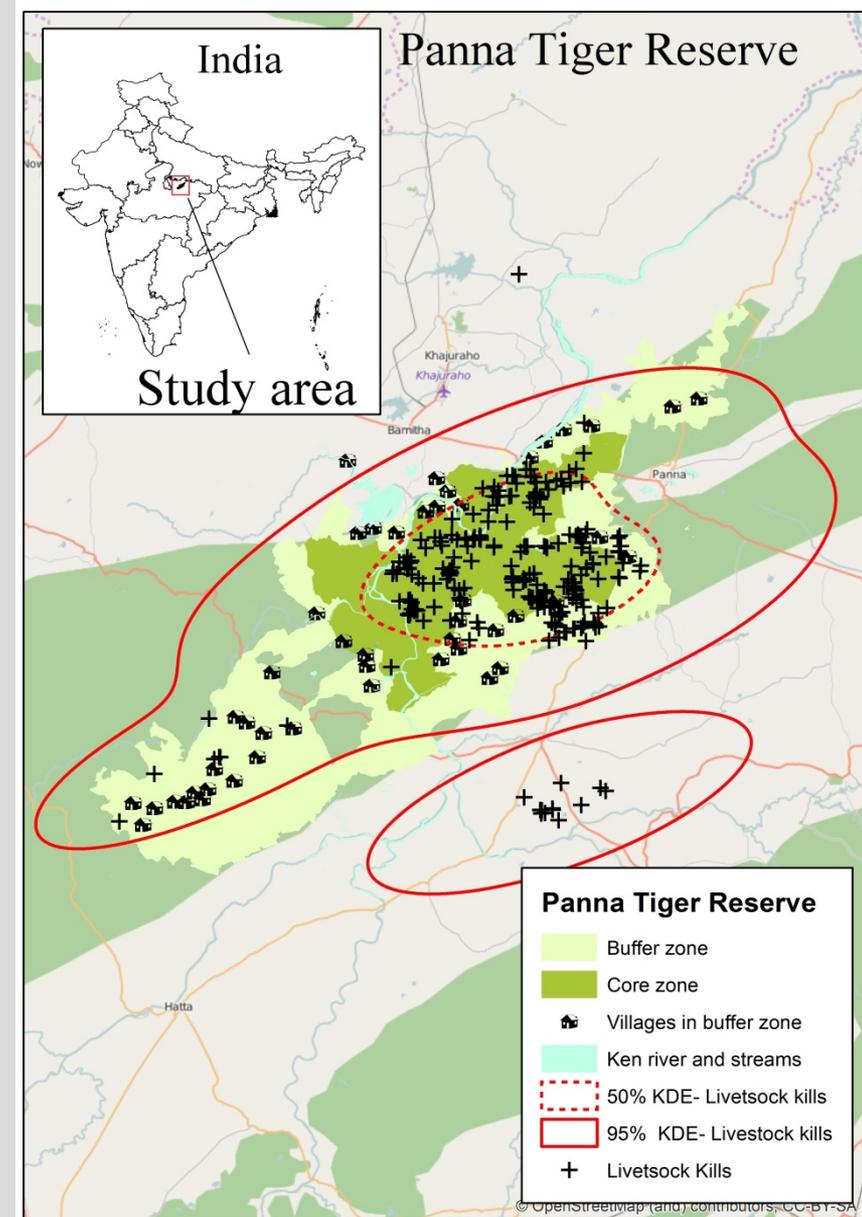


Status of fencing and corrals

Key Findings:

Livestock management created problems

- Most predation of livestock occurred inside the core zone .
- As distance from core zone increased more livestock were killed than wild prey.
- Losses varied seasonally with higher losses during winter and rainy reasons than summer.

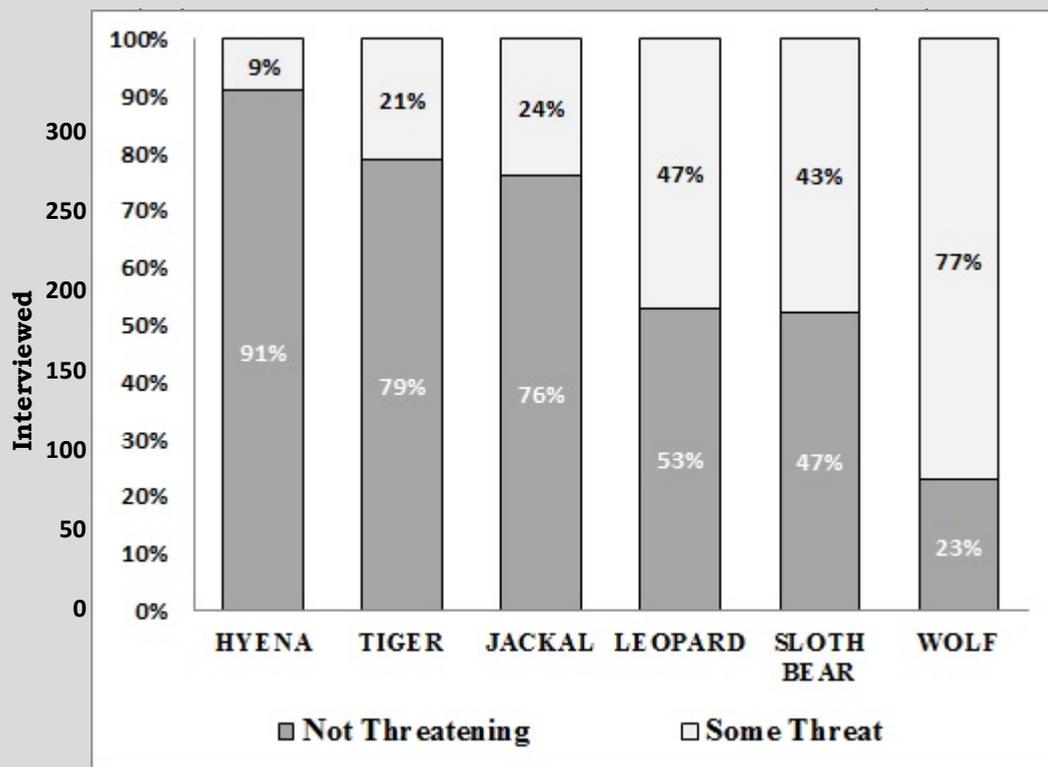


Key Findings: Knowledge on carnivores was high

- High familiarity with forests and local wildlife
- High familiarity with threats from carnivores
- High acceptance that predators were part of the landscape
- Most people were content with their ability to mitigate losses



Shepherd explaining his tiger sighting



Key Findings: Religious beliefs and norms towards wildlife are wide and adhered

1. Tiger is a spirit - People make pacts with spirits
2. Fear of retribution for breaking norms is high.
3. Community norms and taboos have functional benefits
4. Adherence was mostly through self regulation
5. In extreme cases where losses persist people blame the forest department



Spirit calling ritual ceremonies



Conclusions

(Likely reasons for the high tolerance on carnivores)

- There is wide acceptance of losses, both to crops and livestock
 - People consciously weigh possible benefits from their religious
 - Crop raiding is a bigger issue in the study area than predation.
 - Decline in dependence on livestock for livelihoods
 - Higher livestock losses in the reserves than predation
 - Adherence is on the increase
 - People benefit by allowing their animals to roam feral
- Tolerance can be reversed if predation increases or**
These also shift people's focus elsewhere from predators.
if human fatalities occur
Benefits outweigh costs – therefore the tolerance
and medium term.

African Vs Indian Experience

Approach to HWC resolution

Africa

- Fences - Limiting distribution
- Fines - Penalties for deliberate killing
- Carnivore hunting - lethal control - limiting numbers
- Changing land use practices/ agricultural practise
- Translocations/ reintroductions
- Public participation, education and awareness raising
- Compensation or consolation payments
- Location specific innovations – blinking lights against lions or bee boxes for elephants

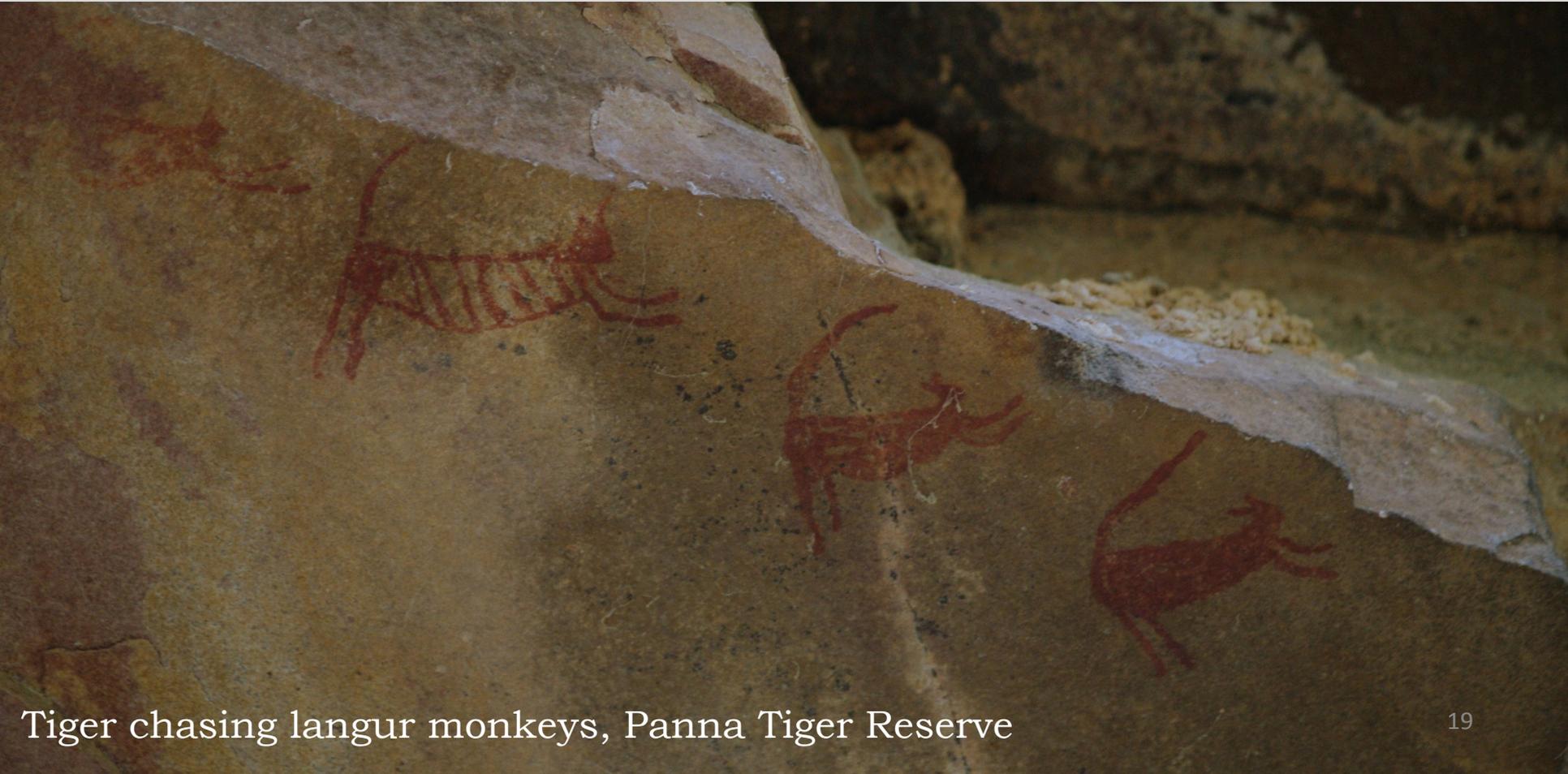
India

- Law and prohibitions based enforcement
- Heavy reliance on traditional tolerance
- Role of religion and traditional practices in conservation are increasingly acknowledged
- High reliance on existing PA systems for endangered species
- Financial Compensations (?)
- Translocations / reintroductions (?)
- Case specific innovations: Insurance schemes

References

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Thank you !!



Tiger chasing langur monkeys, Panna Tiger Reserve