Promoting the conservation of Red Colobus in Itwara and Matiri Forests, Uganda through population monitoring, awareness creation and beekeeping

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Outline of the talk

1. Introduction
2. What we have done
3. Conclusions
4. Acknowledgements

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Meet the team

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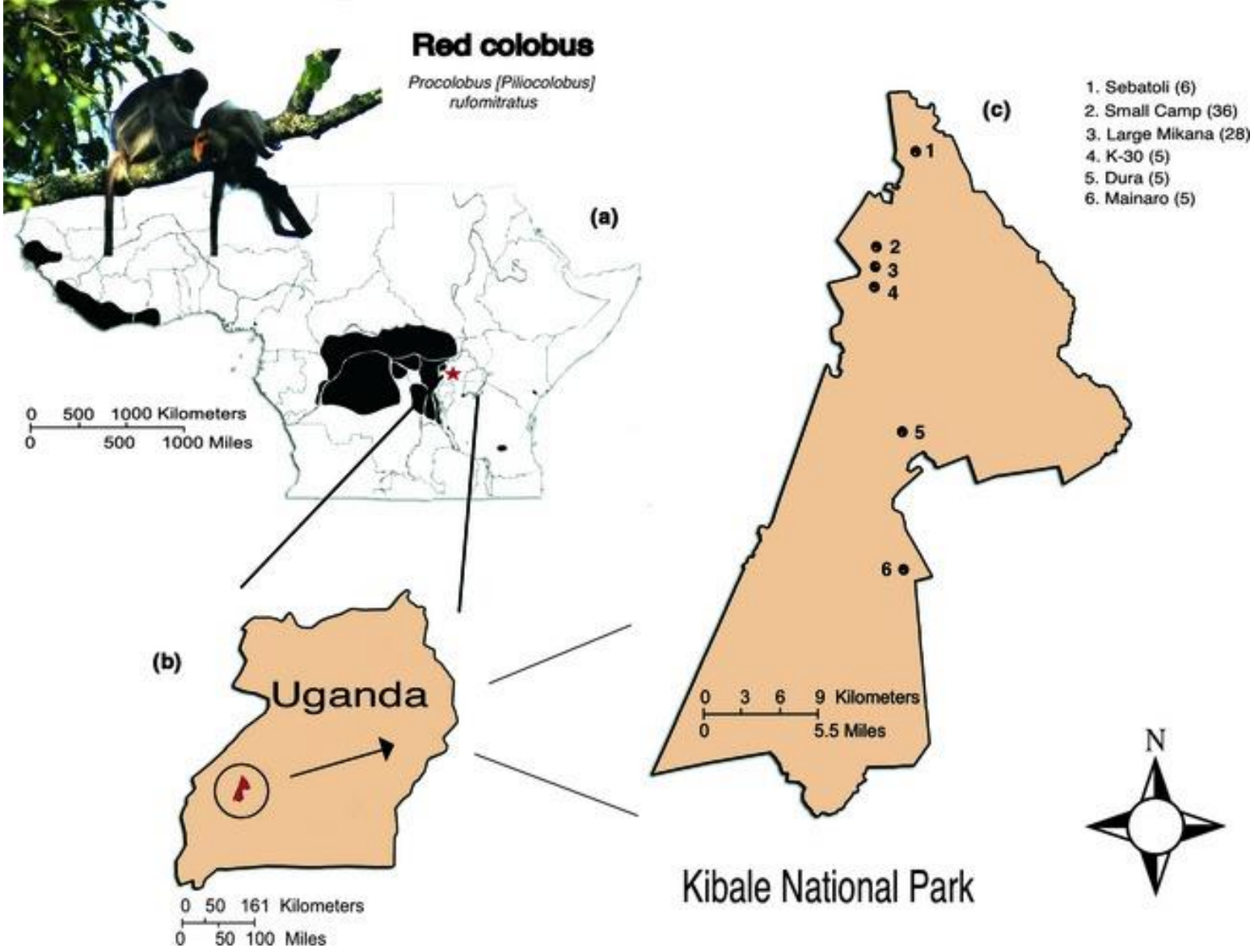
Introduction

Red colobus: *Procolobus rufomitratus tephrosceles*

- Threatened primate species



Distribution of red colobus across north central Africa (black shading; Ting 2008), with the red star highlighting Kibale National Park (KNP). (b) Uganda with the location of KNP in red (c) KNP

Introduction

➢ Red colobus distribution in Uganda

- Kibale National Park
- Matiri and Itwara Central Forest Reserves (Mugume et al. 2015)
- Semliki National Park and Wildlife Reserve?

➢ Red colobus threats

- Human activities
- Chimpanzee hunting

Need to protect isolated populations of Red colobus

Chimpanzee eating a monkey

Project Goal

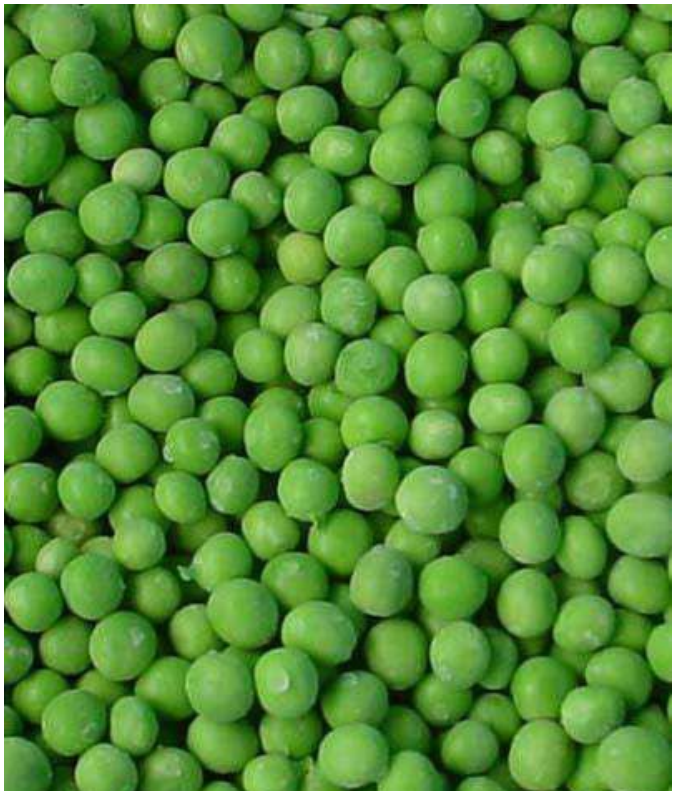
- Promote Red Colobus conservation in Matiri and Itwara Central Forest Reserves in Uganda
  - Population monitoring and habitat quality assessment
  - Promoting Red Colobus conservation in schools and community
  - Promoting environmentally friendly IGAs e.g. beekeeping

Why beekeeping

Bees are a key component of agriculture worldover

- About 80% of Uganda's population is involved in agriculture

- Beekeeping: source of household incomes, food & employment
  - ✓ Annual pollination value: $ 0.49 billion from crops valued at $ 1.16 billion



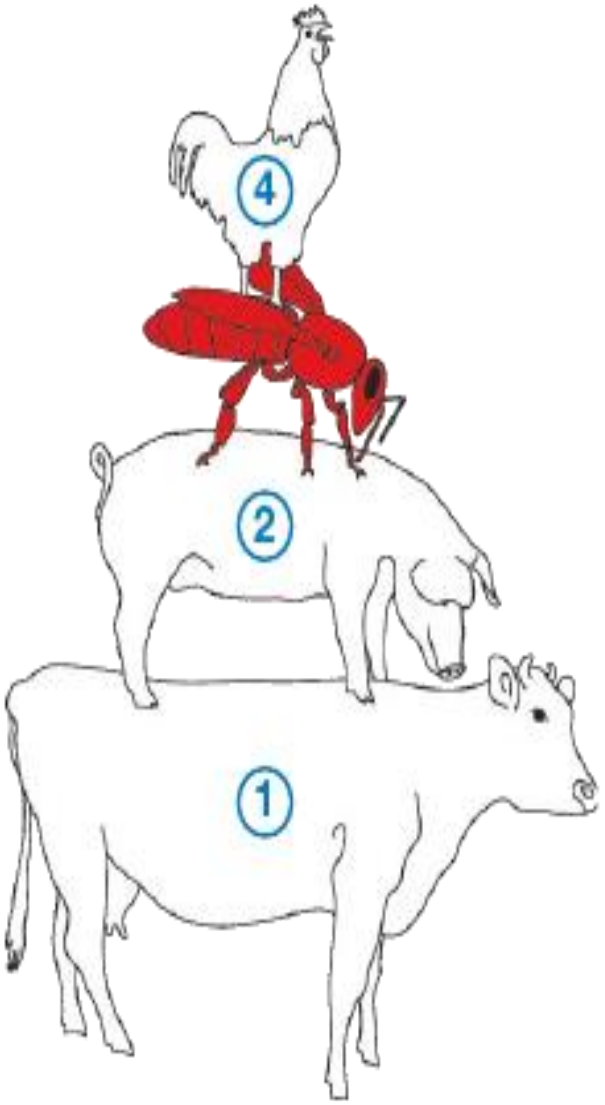
Introduction

Economics of beekeeping

- Economically, beekeeping is ranked 2nd or 3rd among livestock world wide

Livestock	Economic importance ($)
CATTLE (meat, milk, skin)	331,407,538,000
Honeybees (products, pollination)	180,990,944,120
Pigs (meat)	173,423,160,000
Poultry (meat, eggs)	144,241,789,000
Sheep (meat,milk, wool, skin)	41,319,473,000
Goat (meat, milk, skin)	25,331,724,000

Source: Jacobs et al. 2005



Beekeeping in Uganda

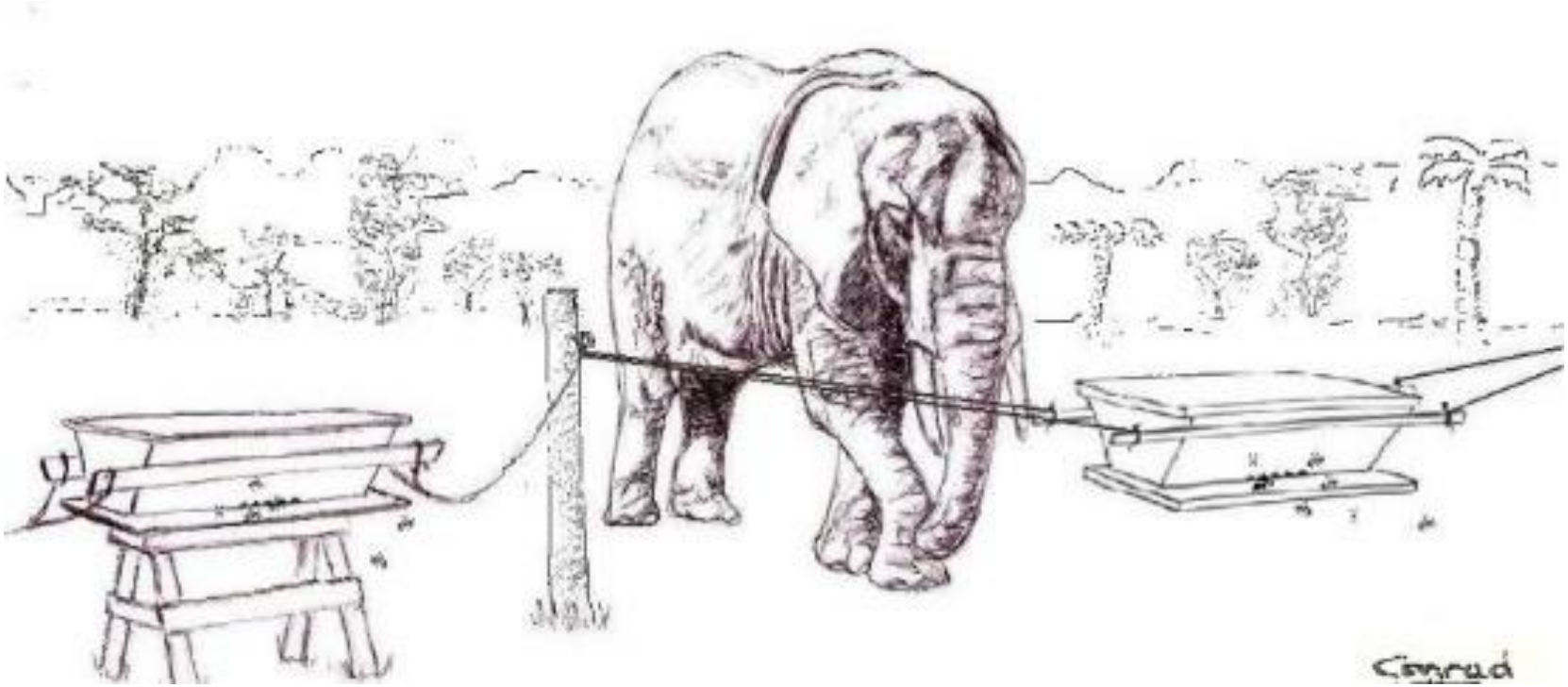
Relatively low-cost & low labour intensive enterprise that does not require a lot of land

Beekeeping can be practiced in unproductive lands

Viable for people like women & youth who are least likely to access production factors

Beekeeping and Conservation

- Pollination of wild plants: food for wildlife
- Controlling elephant crop raiding



Earnings from tourism: $ 979 million in 2013; largest foreign exchange earner

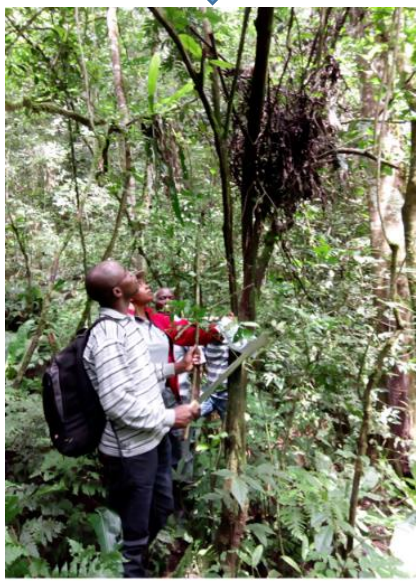
- Beekeeping important for sustainable development

What we have done

Field work

Questionnaire administration

Field surveys

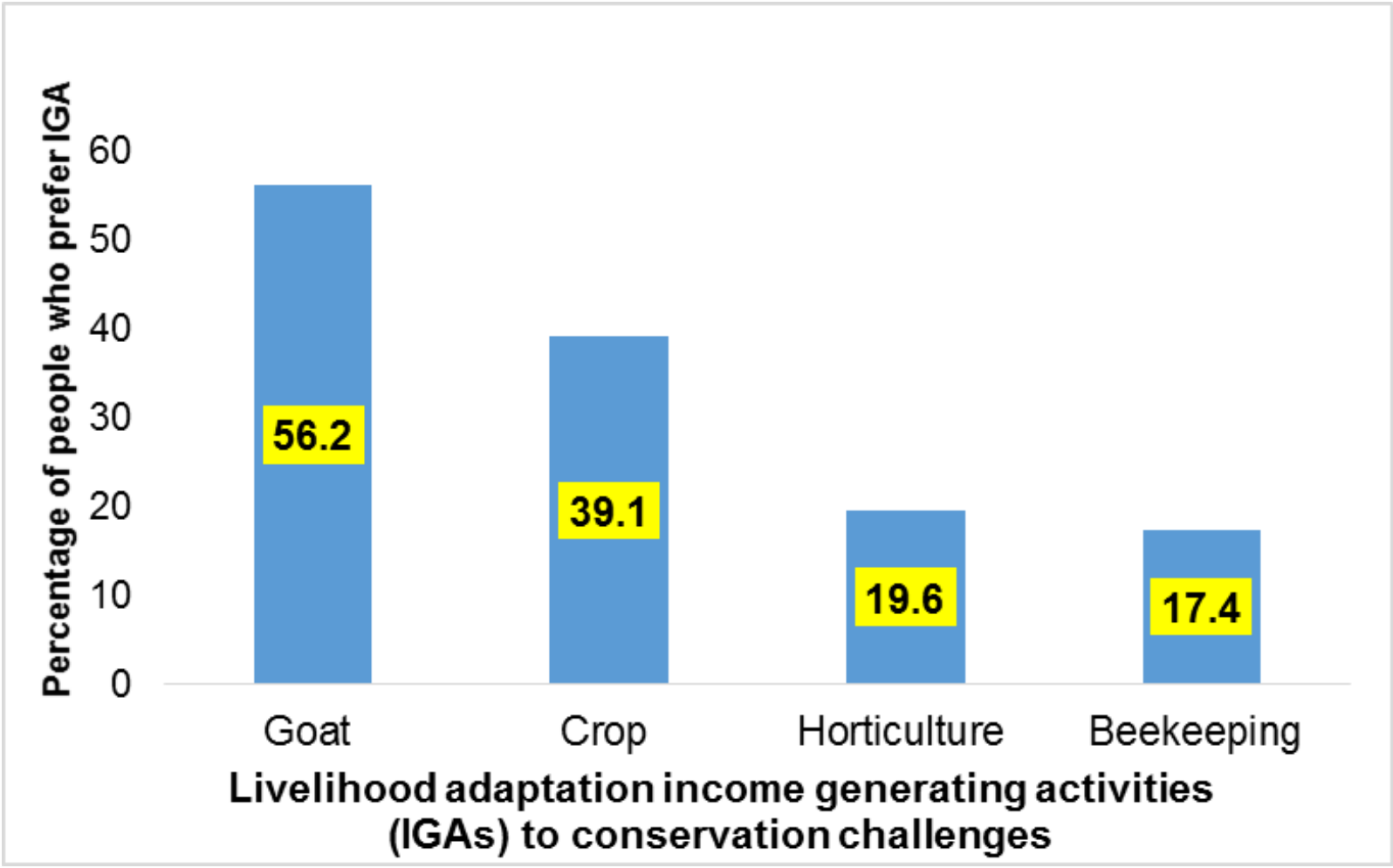


- Data analyses
- IPS Nairobi 2018 abstract
- Sharing the findings with stakeholders

Achievements

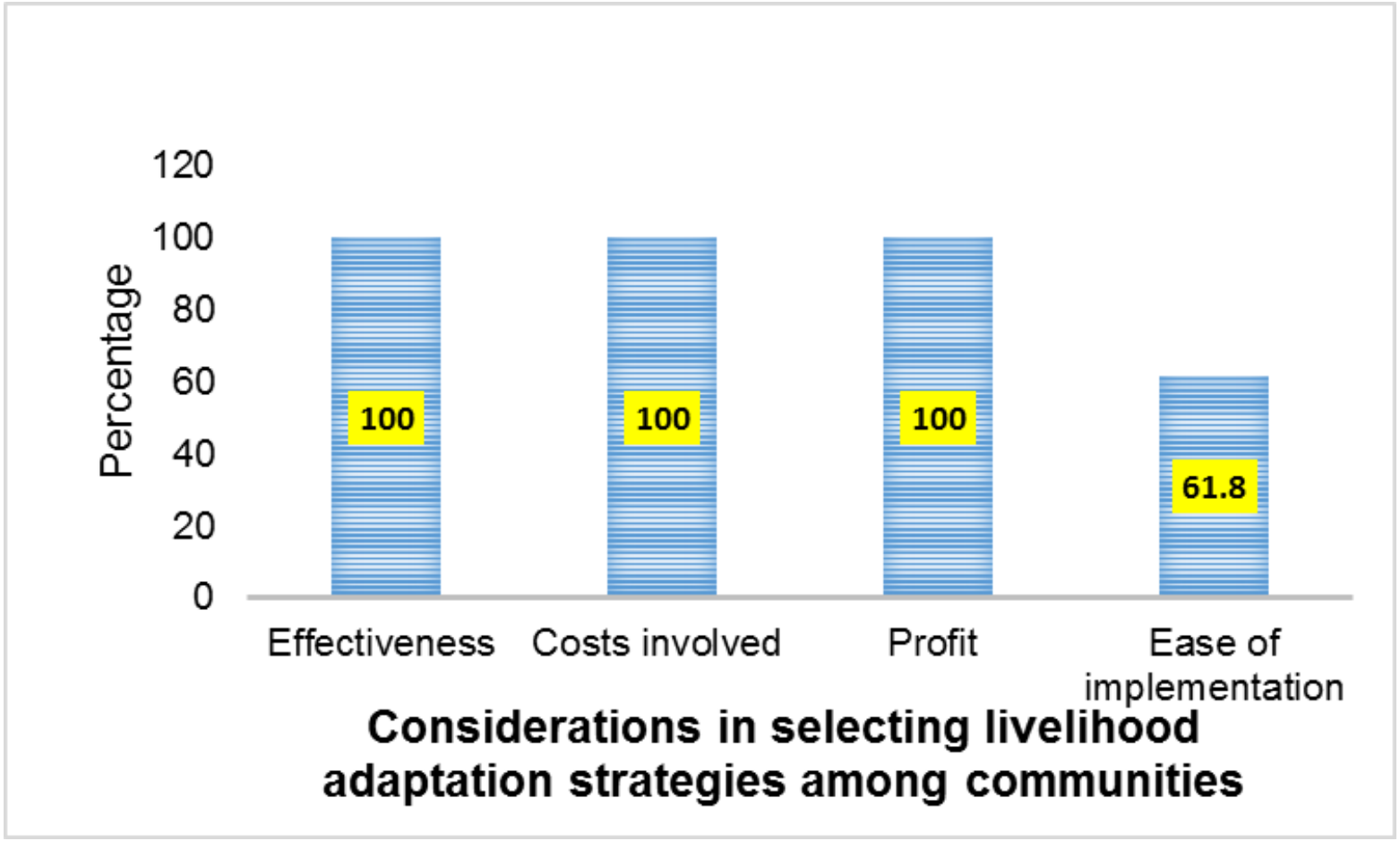
Communities prefer Goat farming

IGAs as adaptation strategies to conservation challenges



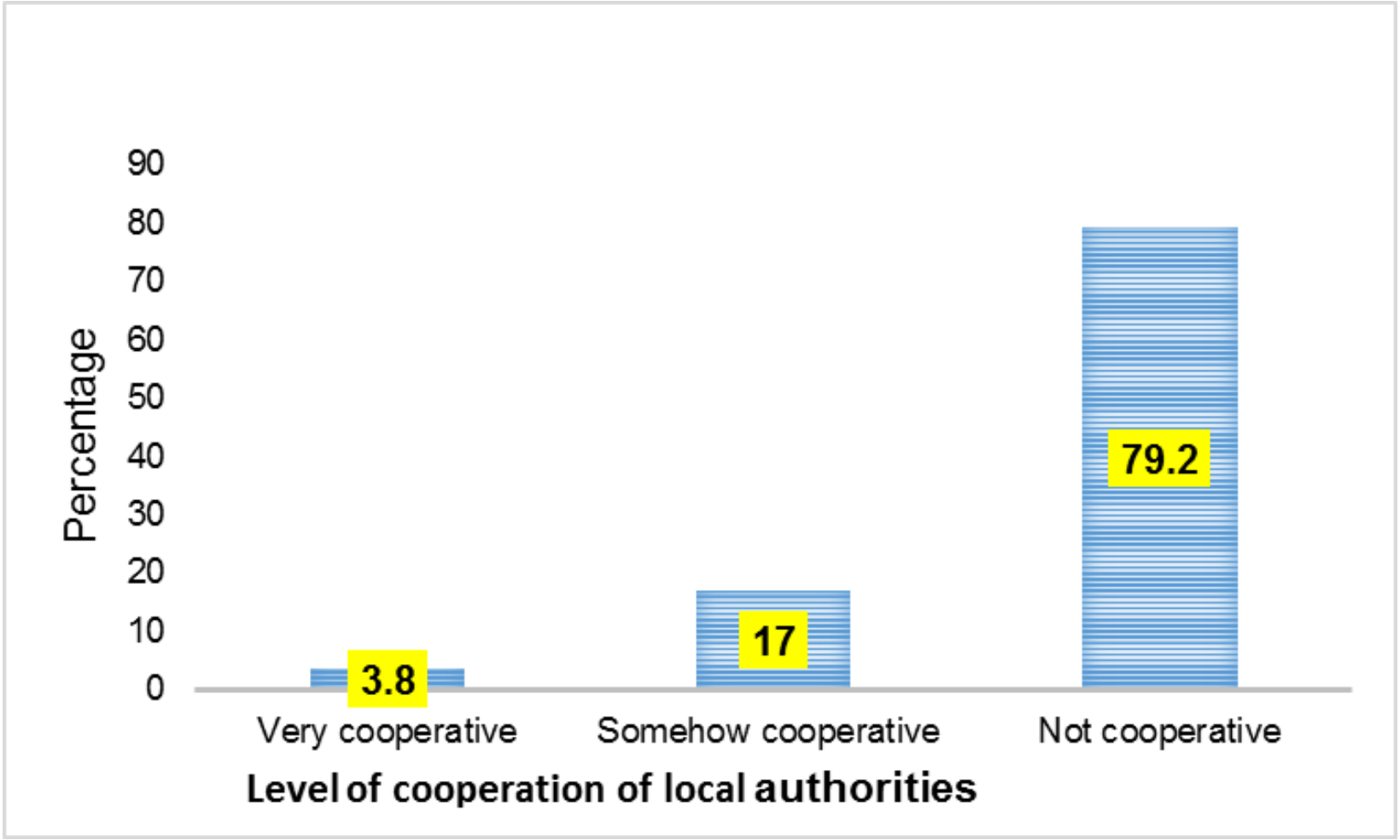
Factors considered by households when selecting livelihood adaptation strategies

Communities consider most effectiveness, cost and profit of IGA



Cooperation of local authorities with communities in supporting adaptations to conservation challenges

Communities say local authorities are not cooperative in supporting their adaptation to conservation challenges



Relative abundance (no. per km transect) **of primates during the survey**






Forest	Chimps	Red Colobus	Blue Monkey	Black & White	Red-tailed	Baboons
Itwara	8.6	0	4.2	27.2	21.7	1.3
Matiri	0	0	0	3.7	0	0

No record of Red colobus yet in the last 5 months; are they locally extinct?

Frequency of anthropogenic activities per km transect

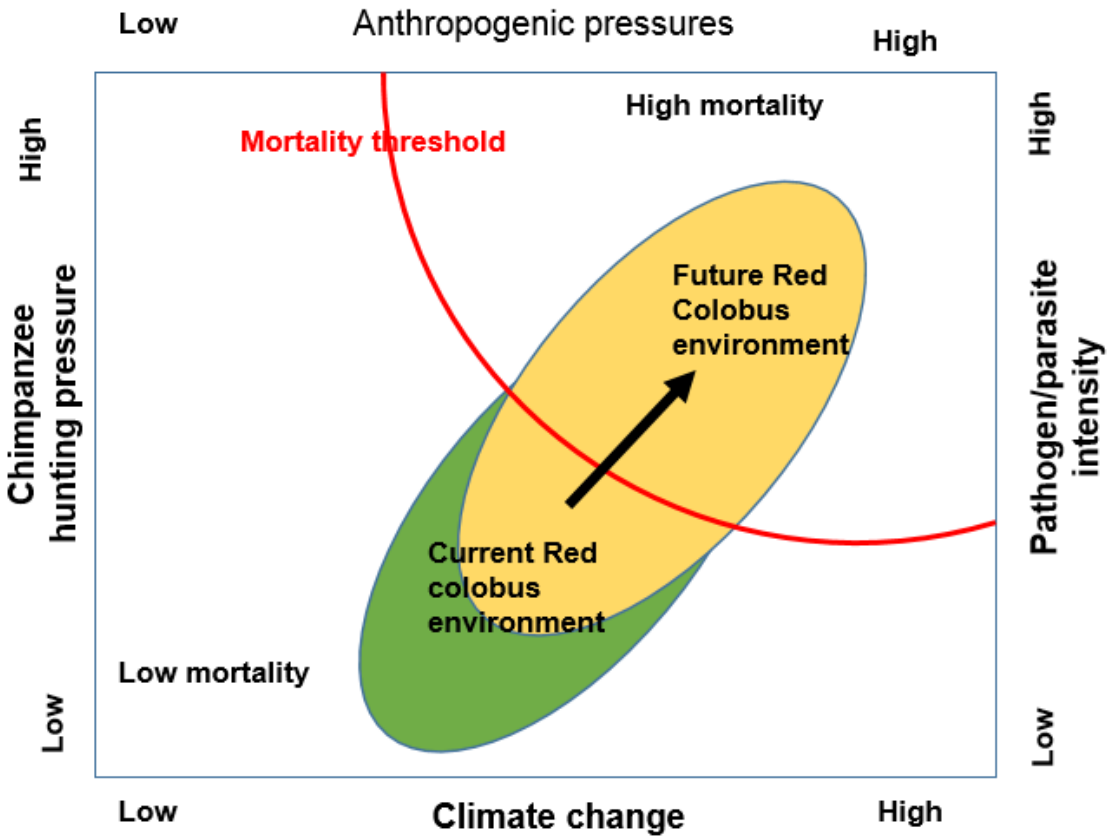
Anthropogenic activities	Matiri	Itwara
Traps	1.7	3.3
Fuel wood sites	1.5	0.3
Pit-sawing sites	8.7	6.2

Relatively higher frequency of trapping sites for wildlife in Itwara

Fresh pit-sawing site in Itwara CFR

Blue dyker trapped in Itwara CFR

Synthesis



Red colobus vulnerability to changes in the environment: Conceptual diagram, showing the range of variability of ‘‘Current Red colobus environment’’ parameters for anthropogenic pressures, climate change, pathogen intensity and chimpanzee hunting with a small portion of the environment situation ‘‘space’’ currently in the low mortality for Red colobus. ‘‘Future colobus environment’’ shows increases in extreme anthropogenic pressure, increased pathogen intensities, effects of climate change and chimpanzee hunting events associated with foreseen environmental changes, indicating increased risks of die-off for current populations.

Recommendations

1. Identification of livelihood options for interventions to address conservation challenges **MUST** involve local communities for ownership

2. Develop effective forest patrolling systems to control illegal activities

3. Regular monitoring of threatened wildlife populations

4. Survey un-surveyed protected areas for Red Colobus

5. Community awareness on Red Colobus is required

Acknowledgements

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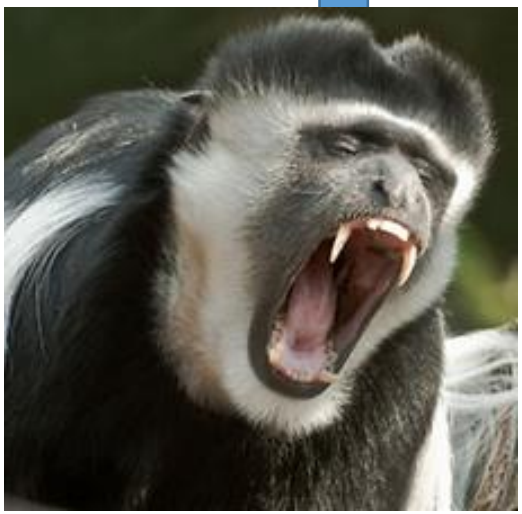
NFA
NATIONAL FORESTRY AUTHORITY
FORESTS FOR PROSPERITY

QE PARKS PROJECT

African Primatological Consortium

Thank you for listening

***Our homes are getting destroyed*! Are we still safe?**



Am not sure! Well, how do we find out?

Ugandan primate conversation