



Veterinary Fencing Assessment - Phase III (Community Perspectives)

AHEAD team

June 2025

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Evaluation of fences as a BW NCCF & KAZA priority

BW NCCF identified need for “state of fences” assessment to inform cross-sectoral decision-making

Important implications for Botswana & KAZA

Consideration:

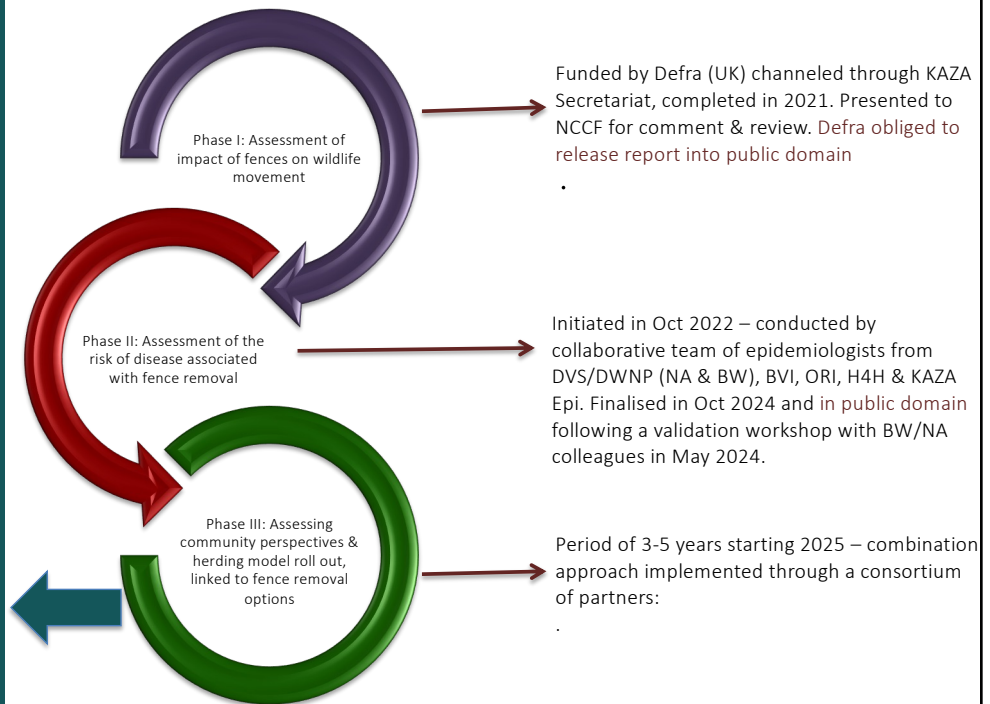
- CBT of beef creates opportunity for less reliance on fences for disease mitigation & enhances income generation potential for communities
- KAZA Master IDP recognizes need for discussions between BW & NA on removal of boundary fences/fence sections in the interest of enhancing landscape level connectivity

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3-PHASE APPROACH

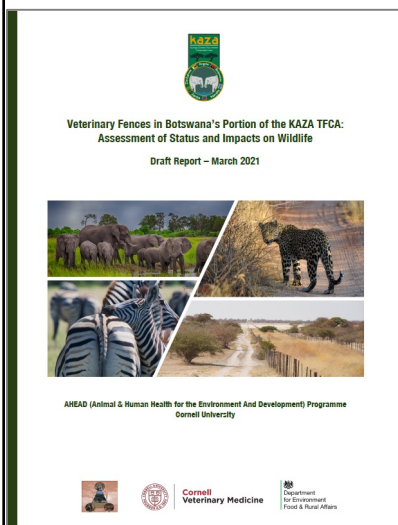
Expected Outcome:
Science-based advice to govts of BW & NA on which sections of fences can be removed

Expected Impact:
Increased connectivity for wildlife movement across the KAZA landscape through strategic removal of fence sections in a manner that doesn't increase risk of disease transmission between wildlife/livestock.



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Phase I: Assessment of the status & impact of fences on wildlife movement in KAZA's WDAs (BW)



1. Kwando River WDA

- Zambezi Border (east)
- Northern Buffalo

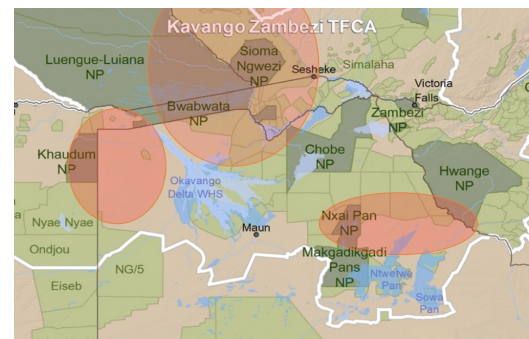
2. Khaudum-Ngamiland WDA

- Zambezi Border (west)
- Western Border
- Samochima
- Ikoga

3. Hwange-Makgadikgadi-Nxai Pan WDA

- Ngwasha

**Southern Buffalo, Setata & BW-ZW Border fences briefly touched on*

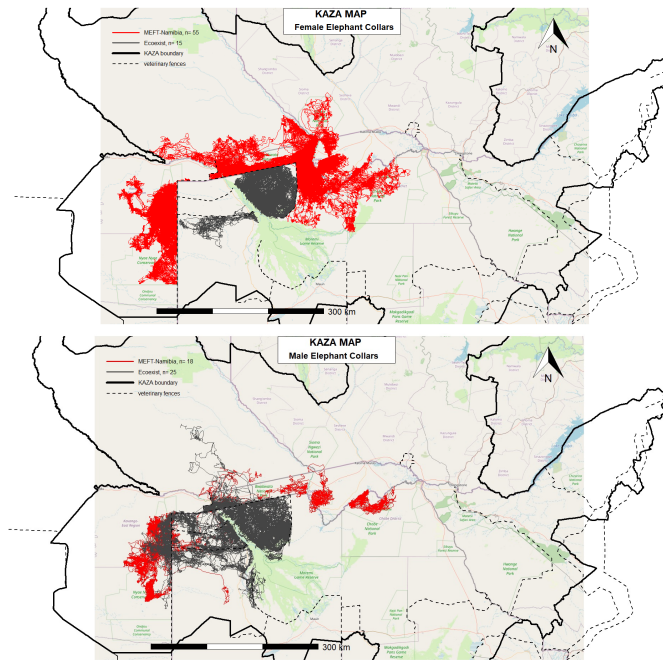


Analysis based on:

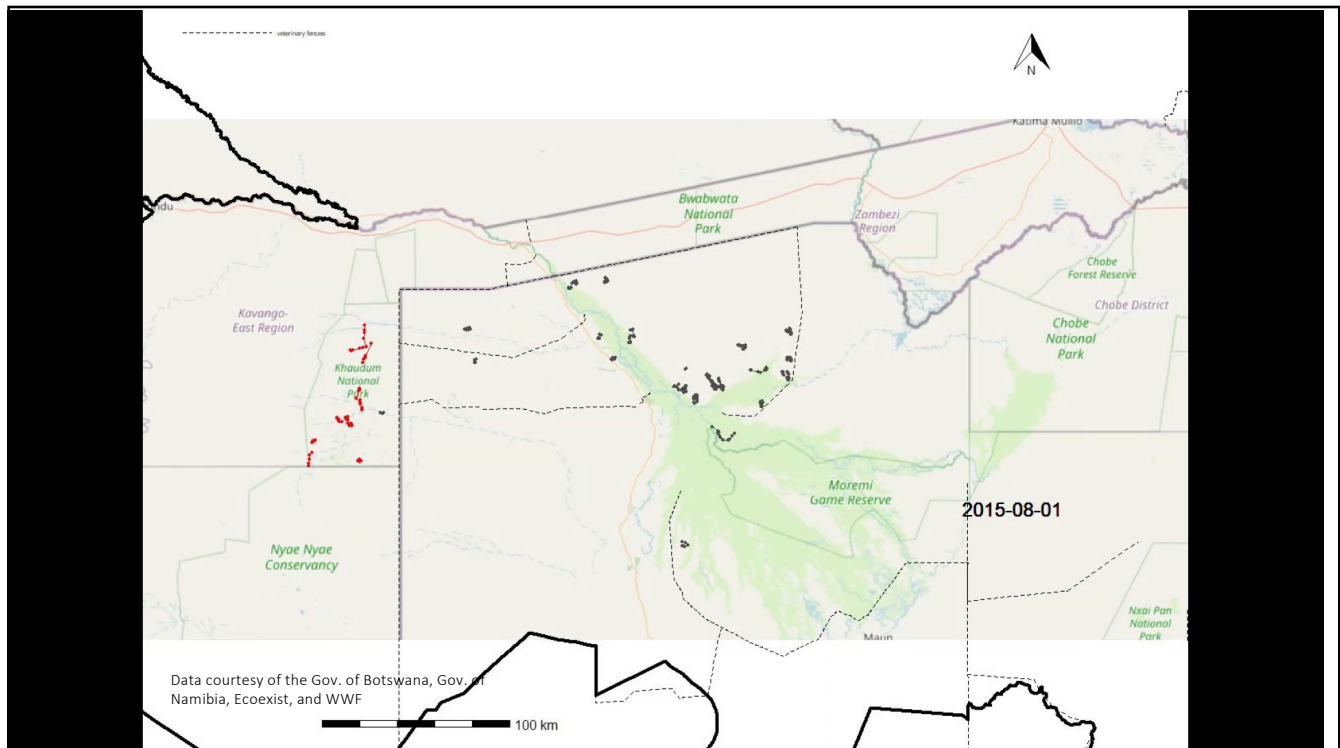
- 10+ years GPS wildlife collaring data (BW & NA)
- Aerial surveys (w DVS & DWNP observers)
- Ground surveys
- HWC data & coexistence strategies

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Elephant GPS movements across the WDA

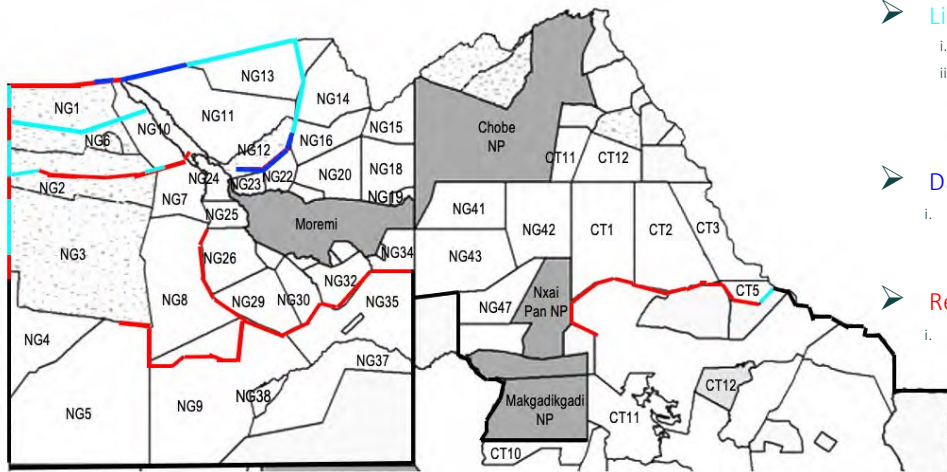


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Phase I summary recommendations

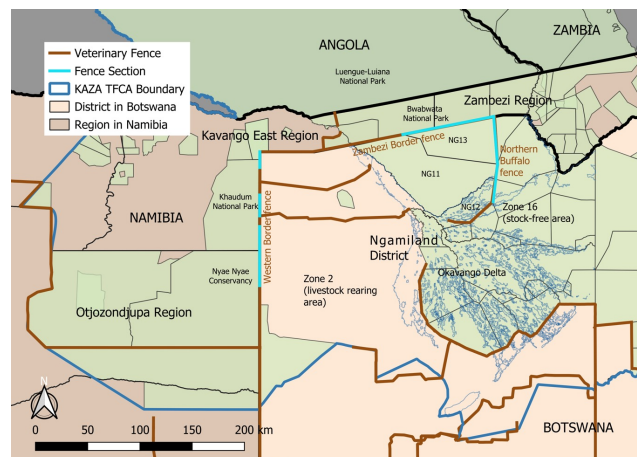


- **Light blue fence segments:**
 - i. Should be considered for removal
 - ii. Therefore, subjected to Phase II – assessment of disease risk transmission
- **Dark blue fence segments:**
 - i. Problematic for wildlife but further review required
- **Red fence segments:**
 - i. No further action recommended at this stage

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Phase II

- **Objective:**
 - assess the change in livestock disease risk from the current situation vs. a hypothetical scenario where specific fence sections identified in Phase I are removed
- **Scenarios**
 - Status quo risk with fences as is
 - Potential risk if fence section(s) were removed
 - Potential risk if fence section(s) were removed & risk mitigation measures (e.g.- herding) are in place

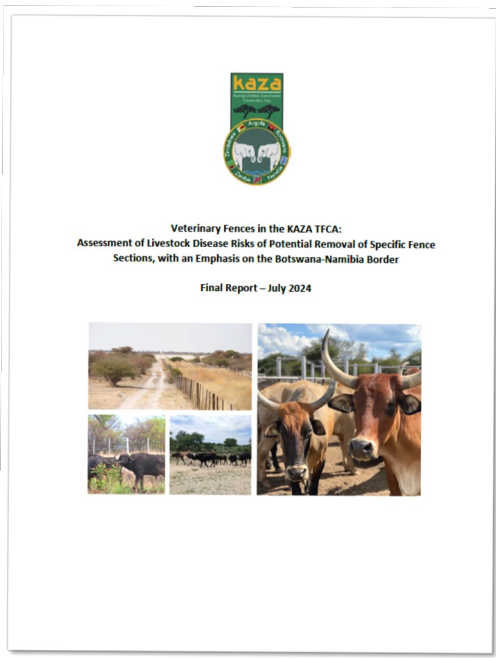


Fences for DzRA:

1. Zambezi Border Fence (east of Okavango River)
2. Northern Buffalo fence
3. Western Border Fence (3 sections)

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Phase II



- **Collaborative approach:**
 - DVS - Mbeha, Sereetsi, Thololwane, Motshegwa, Segale, Raborokgwe
 - DWNP – Comfort Nkgowe
 - BVI – Mokganedi Mokopasetso
 - ORI – Nlingisisi Babayani
 - Namibian colleagues from MEFT & MAWLR
- **Validation** Meeting held in May 2024
- Report finalised in Oct 2024
- **Co-authored** by all of the above & **co-presented** at AHSWG mtg in Jun 2024
- Released into the **public domain**, with exec summary of Phase I as an appendix

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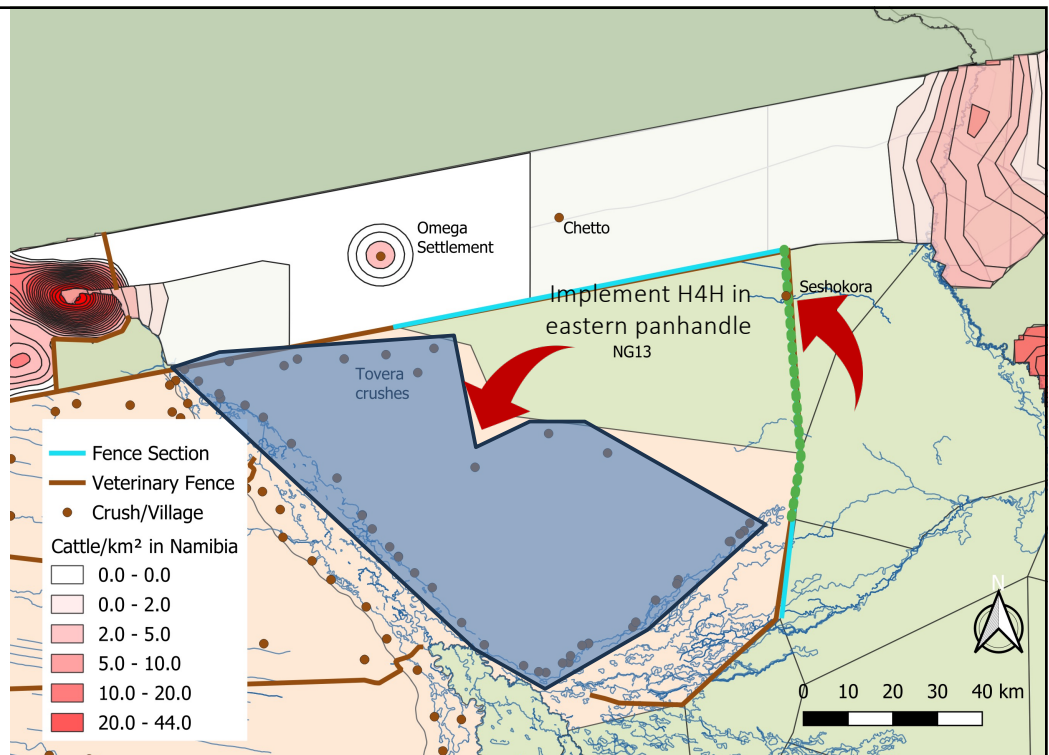
Phase II

Key messages:

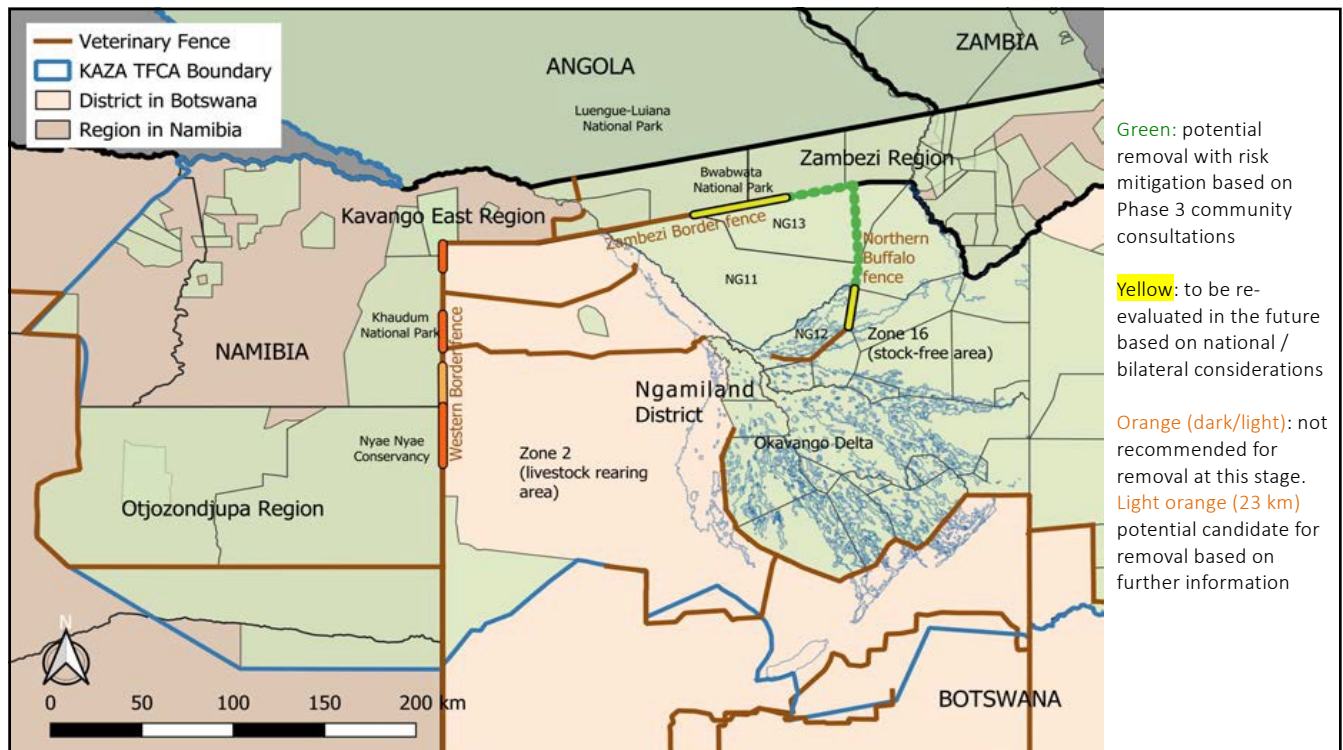
- Vet fence sections of focus are semi-permeable under status quo
- Risk of disease outbreaks remained *the same as status quo* under proposed removal of sections of focus
- Removing fence sections impacts risks at some – but not all – steps in the risk pathway
- Removing fences can affect the risk of a pathogen entering a country or zone
- Risk mitigation measures can reduce risk of entry & exposure
- Intentional illegal movement of livestock across international borders remains a risk (fences unlikely to stop that)
- Fences have limited impact on the risk of poaching – there is only a very low probability of FMD viraemia in adult buffalo & negligible risk of effective contact between poachers & cattle (risk bottlenecks in poaching pathways)

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Risk Mitigation for Northern Buffalo Fence



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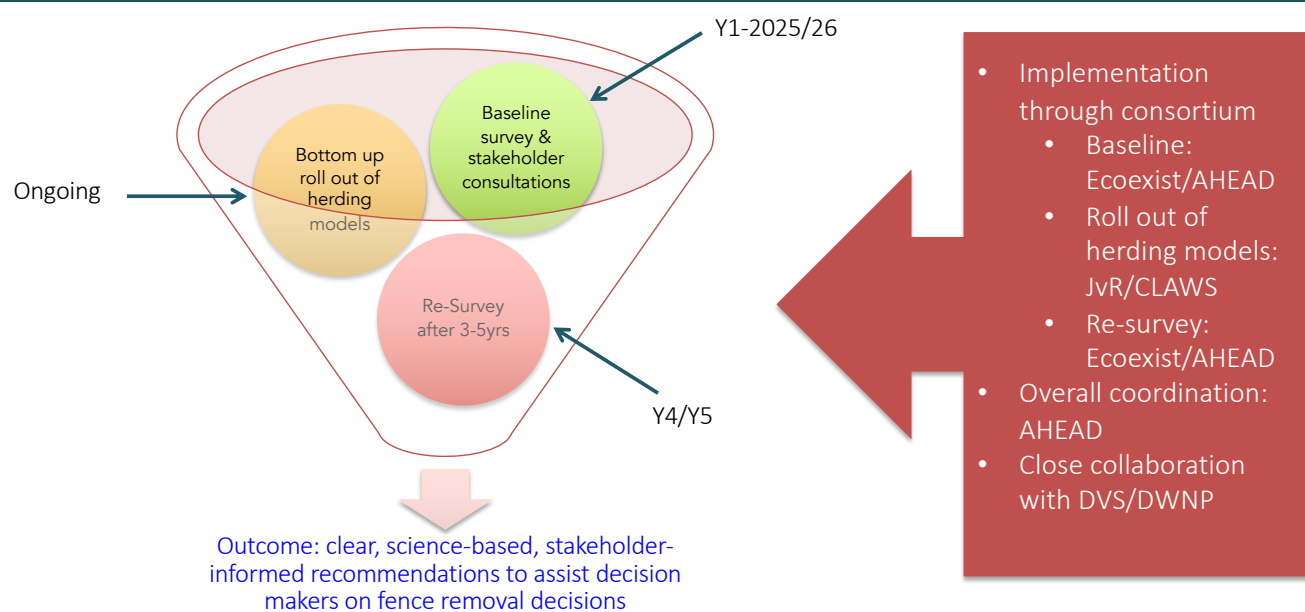
Phase III

Objectives of Phase III:

1. Assess the perceived impact (positive and/or negative) of fence section removals through stakeholder consultations (before & after exposure to herding based models)
2. Determine the willingness of affected communities to implement herding based models of livestock agriculture amongst farming communities of the eastern Panhandle of the Okavango Delta as a key disease risk mitigation measure
3. Plug information gaps with regards to potential land use scenarios, wildlife movements, HWC levels and other attributes through (e.g.) radio collaring of wildlife

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Phase III



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Phase III – Baseline Survey

- Cover all 14 villages of eastern panhandle
- Community engagement:
 - Guidance from Chiefs on approach & support in mobilisation
 - Key informants to guide approach & questionnaire/focus group discussion questions
- **Combination of** questionnaire & focus groups approach
 - Dikgosi from all villages – one grouping
 - One focus group per village with key reps from other “sectors/interest groups” e.g. farmers, trusts, elders, resource gatherers, etc.
 - One set of questions used to allow for comparative analysis
- Questions on historical knowledge of fences, benefits, disease risk management, conflict, perception of wildlife, CBT, etc.

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Phase III – Baseline Survey

Other stakeholders that may be engaged:

- GoB
 - LB
 - DC
 - BDF/APU
 - DWNP/APU
 - DVS
- GoN – at Director level during Y1 (no communities initially)
- Hunting concessionaires
- Tourism operators
- KAZA sub working groups

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Phase III – Potential phased roll out of herding based models

Step 2:

- ~3,300 cattle
- Subject to Omega cattle removal

Eastern Panhandle:

- ~14,320 cattle
- Quite a bit of missing data...

Step 1:

- ~7,244 cattle

Step 3:

- ~3,775 cattle

Approach to be finalised by
consortium partners & DVS

