

HERDING 4 HEALTH: Towards better integration of wildlife & livestock sectors



Founding Partners



Wildlife, livestock and livelihoods in the Kavango and Zambezi Regions, Namibia.

Workshop: 26-27 September 2022, Katima Mulilo

Dr Jacques van Rooyen – Executive Director: Herding 4 Health Programme



Herding 4 Health

Making Africa's rangelands thrive for the benefit of people and nature

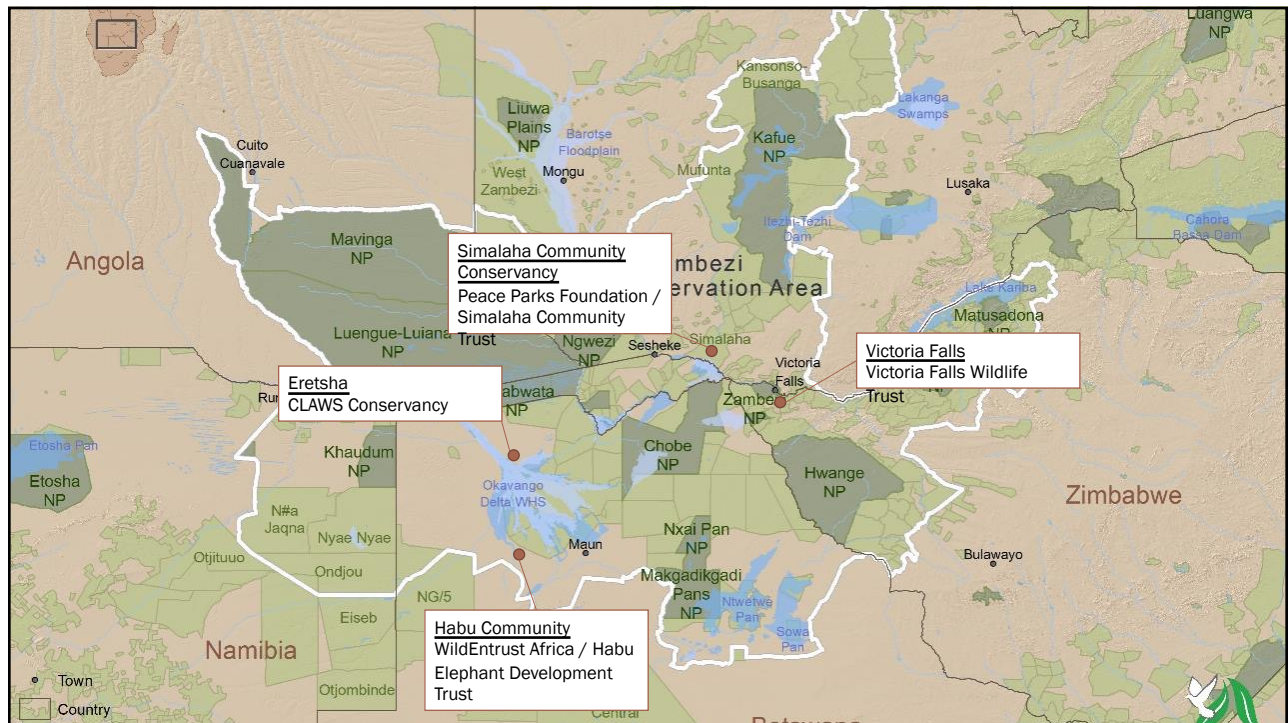
The H4H model was developed to **empower communities & stakeholders** to address the suite of challenges faced at the **wildlife-livestock / community-conservation** interface in a practical, **traditionally acceptable** way that offers **impact and sustainability** in the face of climate change, wildlife-livestock conflict, skills & job shortages, poverty, and transboundary animal diseases.



J van Rooyen

Where we are

- Approx. 20 sites
- 7 countries
- Over 1 million hectares already under improved management
- Over 500 ecorangers already employed

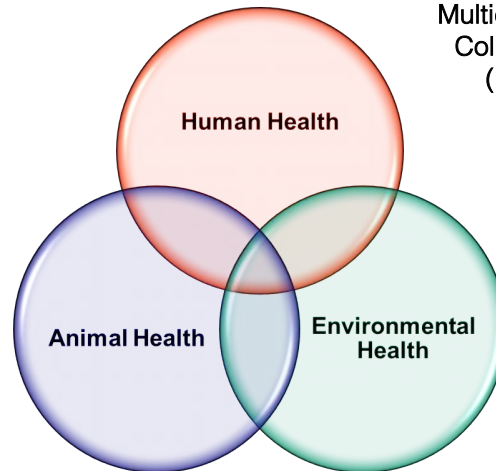


One Health Approach

Holistic
Integrated
Multidisciplinary
Collaboration
(1+1>2)

One Health is a concept that acknowledges and promotes the fact that the health of the environment, the health of animals, and the health of people are interconnected. They cannot be separated and the health of the one will influence the health of the others.

Example: If the rangeland is degraded, it cannot provide sufficient food and water for the livestock, so the livestock will be weak and poor quality and condition. The people that owns the livestock won't get good prices and will suffer as well.



Livestock : Wildlife → Community : Conservation Interface

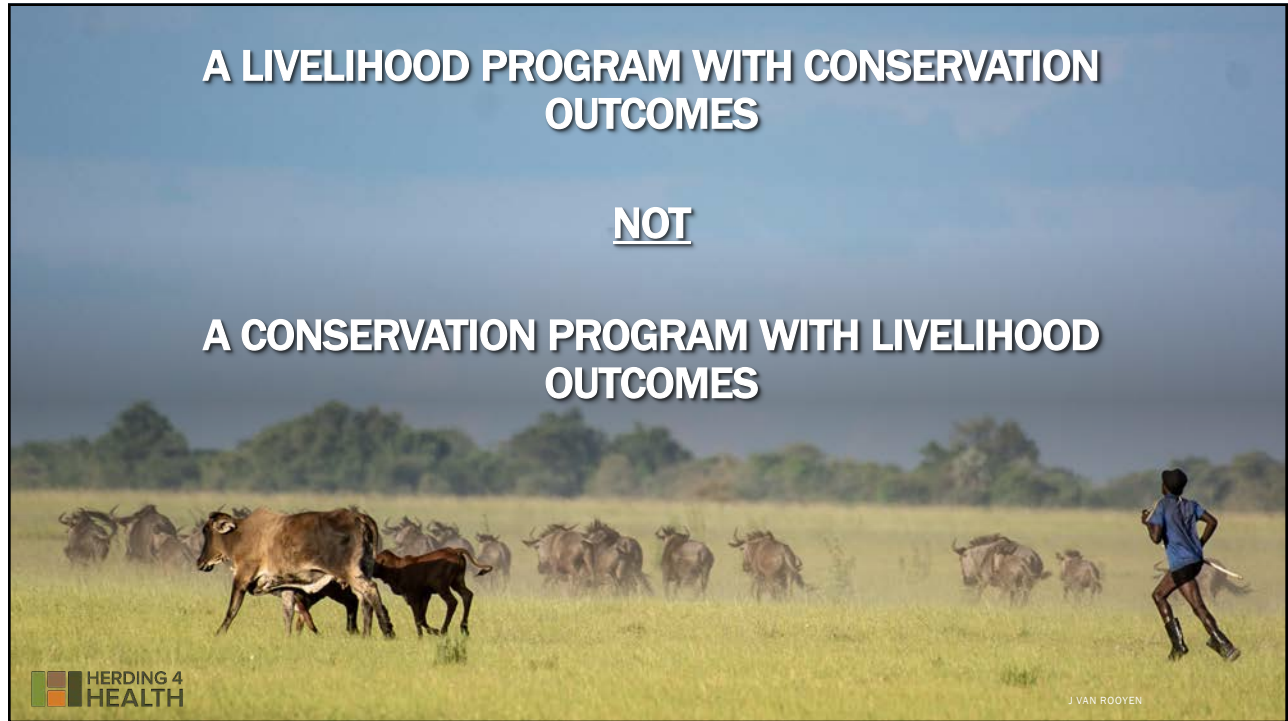
COEXISTENCE: PROBLEM or OPPORTUNITY ??



**A LIVELIHOOD PROGRAM WITH CONSERVATION
OUTCOMES**

NOT

**A CONSERVATION PROGRAM WITH LIVELIHOOD
OUTCOMES**

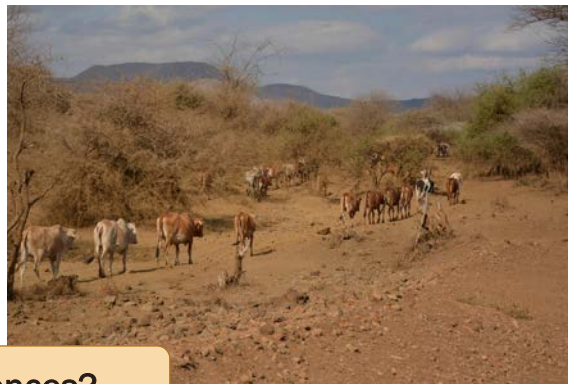


Reality in our Rangelands

Unskilled herding: Drop & Fetch herding...



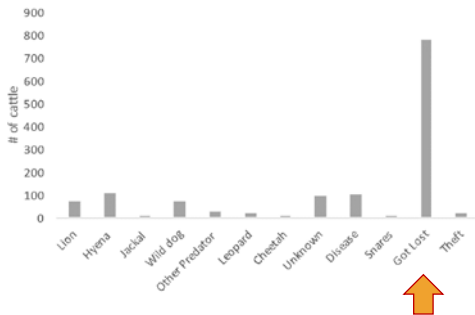
No herding at all – livestock roam unattended...



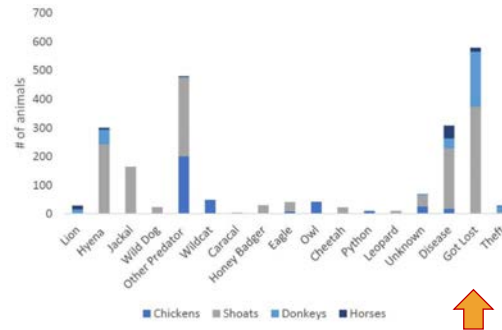
Consequences?

Ngamiland, Botswana – livestock losses

Reasons for cattle losses (n=100)

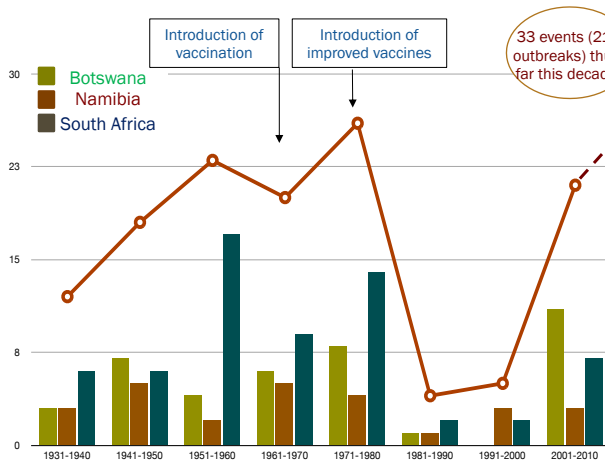


Reasons for small stock losses (n=100)



Heermans, 2022. – PhD Thesis

FMD control in Southern Africa between 1931 - 2019



Incidence of FMD 'events' in cattle over 8 decades in three southern African countries (1931-2010)

Note: An FMD event comprises one or more epidemiologically related outbreaks

FMD control currently based on four integrated activities:

- Separation of FMD endemic zones from zones free of FMD
- Movement restriction in/out of endemic areas (permit system)
- Biannual/tri-annual vaccination of cattle in high-risk areas
- Surveillance (based primarily on physical inspection of cattle)

Basically has not worked well enough over last +/- 20 years!

G. Thomson



NONSTRATEGIC ANIMAL MOVEMENT ONE OF THE BIGGEST CHALLENGES IN COMMUNAL RANGELANDS

REASONS:
LACK OF SKILLS, RESOURCES AND INCENTIVES

Cattle not kraaled and herded properly result in uncontrolled animal movement, increasing:

- Rangeland degradation
- Predation
- Disease transmission through contact with wildlife
- Poor herd health (high mortality & morbidity)
- Poor production
- Disease spread
- Stock theft / road accidents
- Tourism conflict

Challenge in Communal farming systems...

The problems are complex, dynamic and multidimensional
YET
The solution must be simple and practical & traditionally acceptable



STRATEGIC HERDING & KRAALING → **Skilled Herders** → **Best Practices**

Strategic herding & kraaling by skilled herders

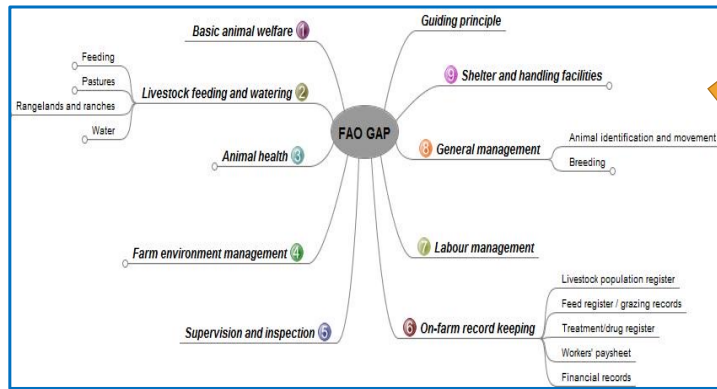
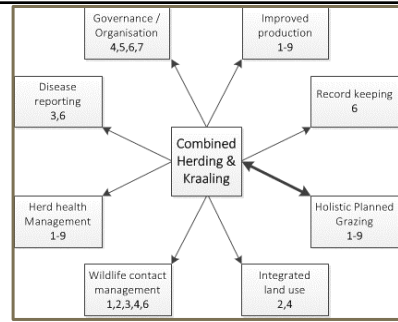
enables communities to comply with livestock & rangeland management **Good Agricultural Practices (GAPs)** as put forward by the **Food and Agricultural Organization (FAO)** of the United Nations.

Compliance with producer protocol must be **ENABLED** with **INCENTIVES**, not just **REQUIRED**

Collective action and deployment of skills through combined herding and kraaling



Van Rooyen 2016

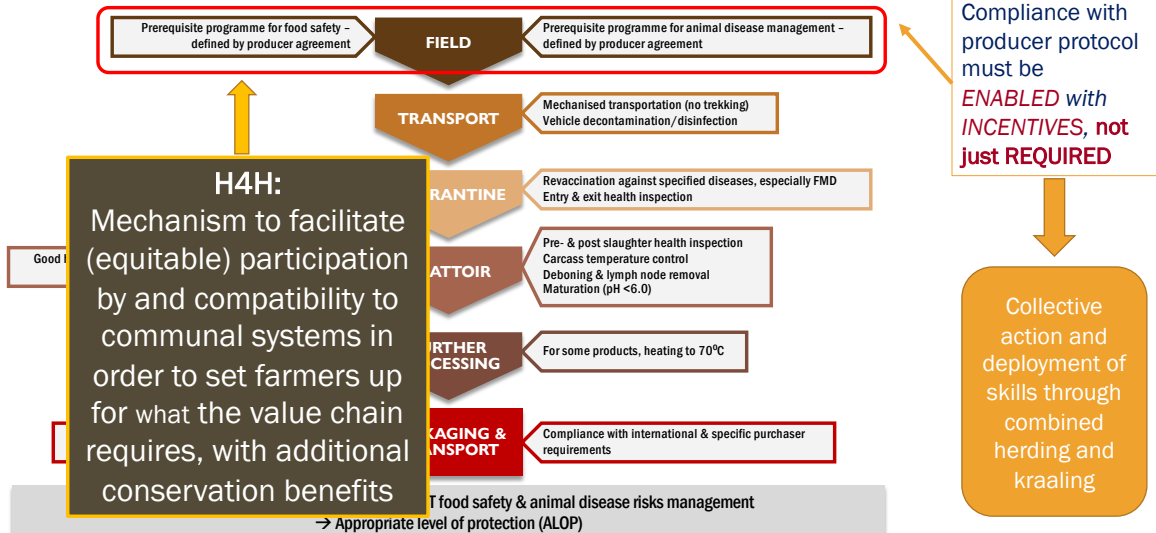


Commodity-Based Trade Through an integrated value-chain approach

Certification

FOOD SAFETY RISK MANAGEMENT

ANIMAL DISEASE RISK MANAGEMENT



Thomson & Penrith 2015

H4H Compliance

CLIMATE SMART
WILDLIFE FRIENDLY
SUSTAINABLE



CBT COMPLIANCE
IMPROVED MARKETS
ENTERPRISE OPPORTUNITIES
COMMUNITY – CONSERVATION
COLLABORATION



TURNING RISKS INTO OPPORTUNITIES



A model for climate-smart, wildlife-friendly, and sustainable red-meat production



Enables compliance of farmers through collective herding by skilled Ecorangers, with market access and risk mitigation as incentives



Ecorangers: Professional herders



Basic Core Skills

- Primary animal health care & disease reporting
- Planned grazing
- Record keeping; traceability, M&E
- Animal husbandry / production
- Wildlife avoidance (predators /disease /competition)
- Low-stress handling
- Community communication/ mobilisation

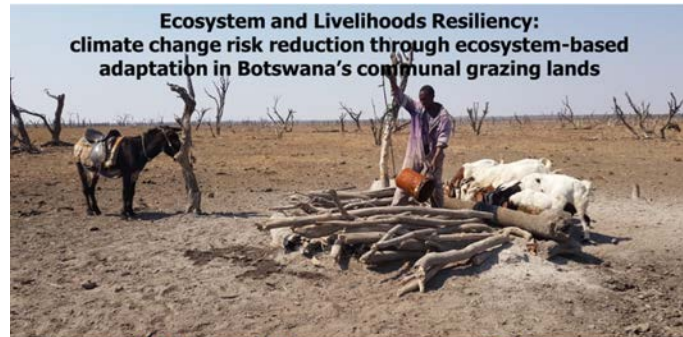
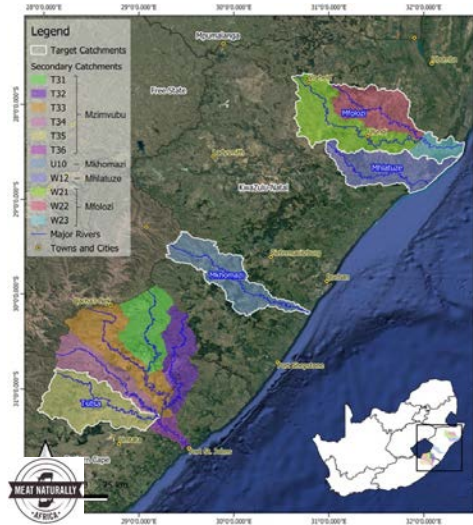
Offered at three levels of training

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Climate and Carbon for sustainability at scale...

1. Pvt investment in carbon to scale H4H

2. National level implementation of H4H

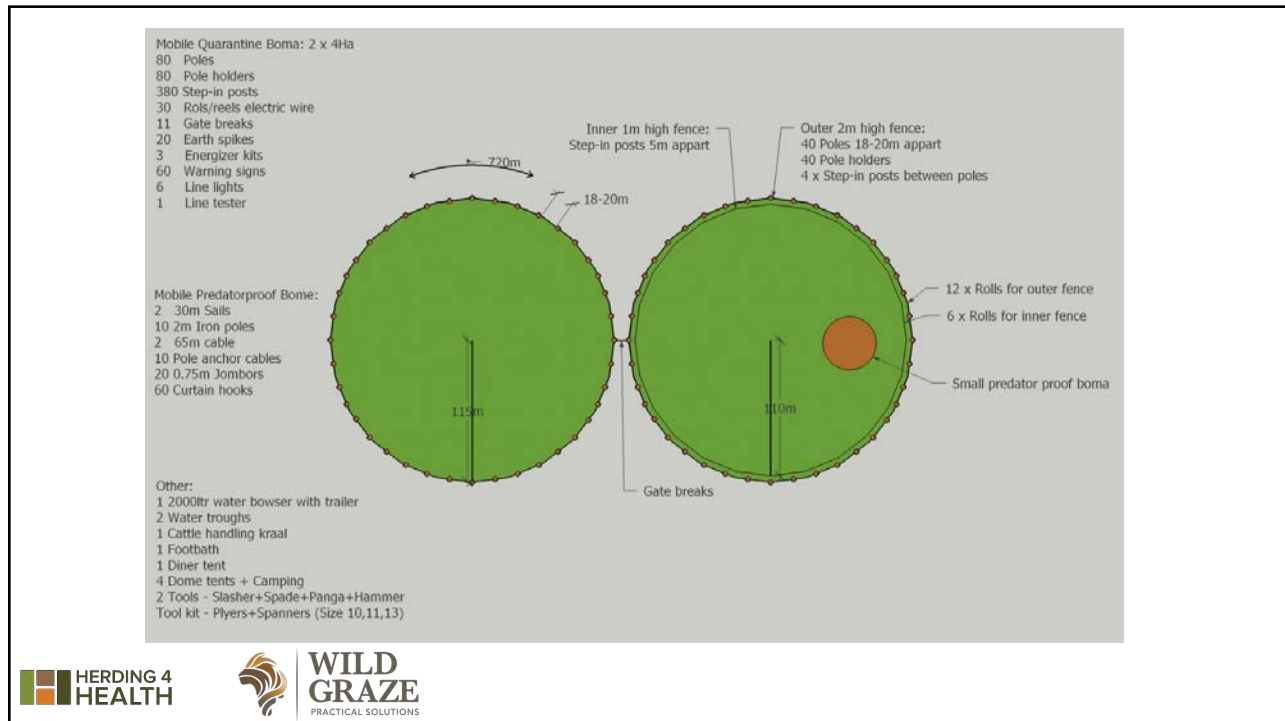


- \$97 million investment over 8 years
- 4.6 million hectares
- 6,000 ecorangers

SUBSIDISES BEST PRACTICES COMPLIANCE => CBT!!

Community-based mobile quarantine facility for market access & CBT compliance in foot-and-mouth disease areas



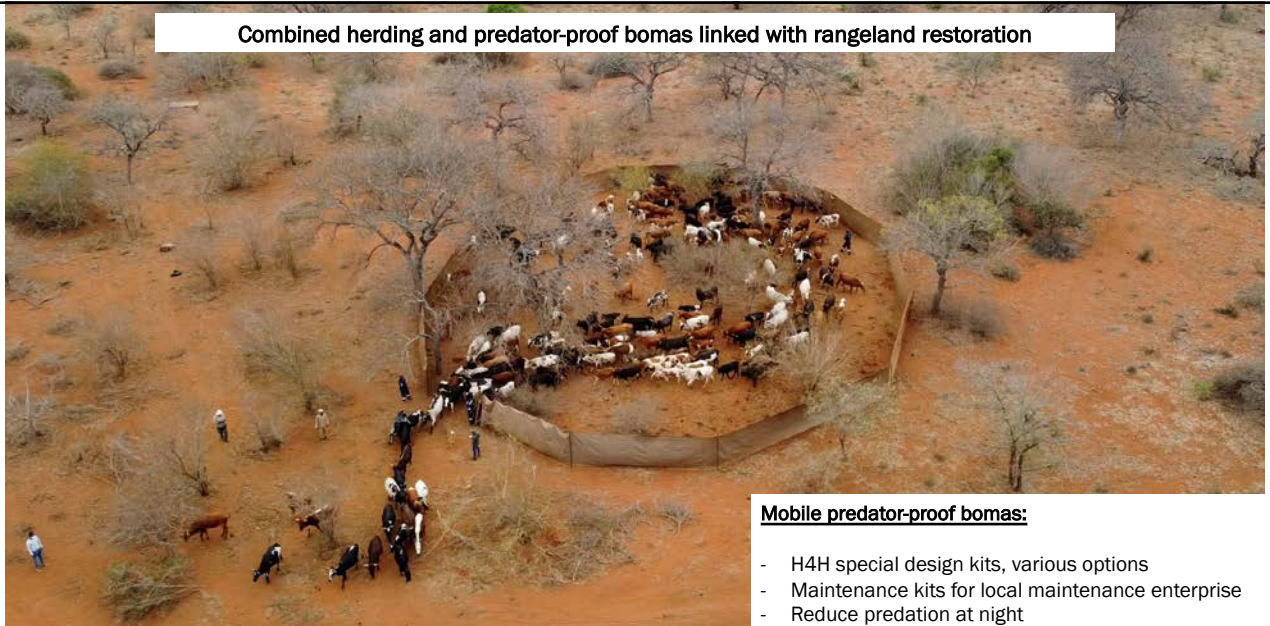


H4H Mobile quarantine concept



Currently piloted in Ngamiland, Botswana

Combined herding and predator-proof bomas linked with rangeland restoration



Mobile predator-proof bomas:

- H4H special design kits, various options
- Maintenance kits for local maintenance enterprise
- Reduce predation at night
- Improve husbandry and surveillance
- Assist rangeland restoration
- Improve crop production



Women empowerment and enterprise development

Women enterprise: Boma repair service



Women harvested grass seed to sow in degraded areas treated by bomas



More and more women herders are coming forward and becoming leaders of change

Mobile abattoir



CONCLUSIONS:

- Question: With proper control at village level – is quarantine really needed?
- One of our biggest problems is FEAR: Fear of what might happen if people benefit from livestock
- Wildlife-livestock coexistence, and CBT for that matter, can only truly transform lives if we empower and entrust the people of the land to manage the risk, and not limit it to the esteemed position of an official that sees the animals once or twice a year



A wise man once said...



*"The answer to our
FMD challenge,
is herding!"*
Dr Modise,
(Ex)Director, DVS Botswana



*Herding 4 Health -
For the people of the land and the land of the people*

Dr. Jacques v Rooyen
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Thank you!!



Jacques van Rooyen

