

Assessment of Veterinary Fences (Phase II): Disease Risk



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KAZA AHSWG/VFWT

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What could go **wrong**?

How **likely** is it to happen?

What is the **magnitude** of the
consequences?

What could go **wrong**?

Identify hazards

Develop scenario tree

How **likely** is it to happen?

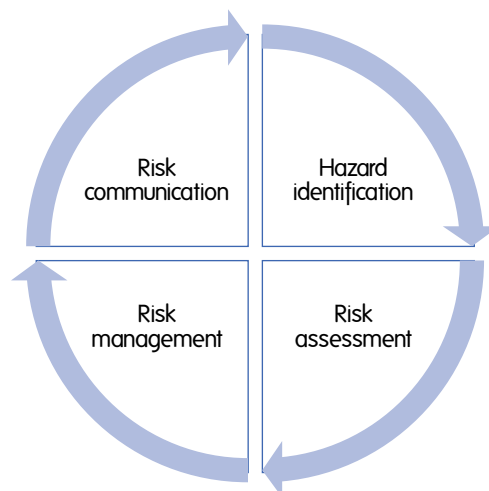
Collect data sources/elicited expert opinions

Determine risks (qualitative/quantitative)

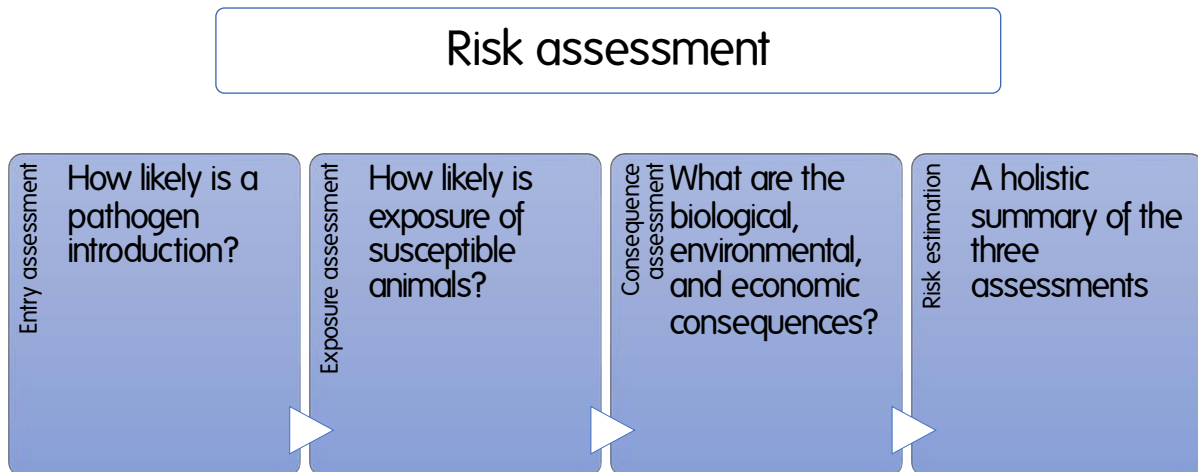
What is the **magnitude** of the consequences?

Consider biological, economic, and environmental

OIE (WOAH) Framework for Import Risk Analysis



OIE (WOAH) Framework for Import Risk Analysis



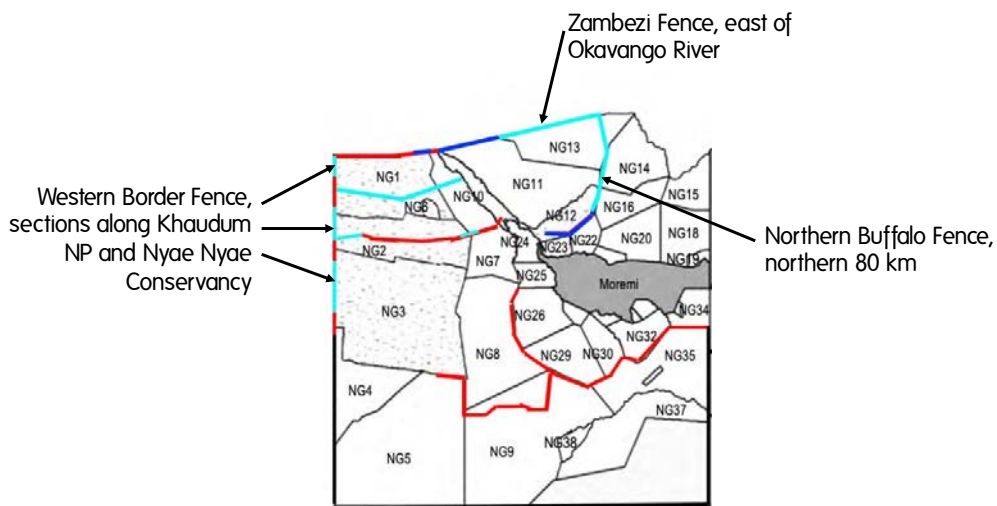
Qualitative

Risk Level	Definition
Negligible	Rare occurrence to be ignored
Low	Rare but occurrence a possibility in some cases
Medium	Regular occurrence
High	Very regular occurrence

TABLE 2 Combination matrix used for conditional events occurrence probabilities (Gale et al., 2010)

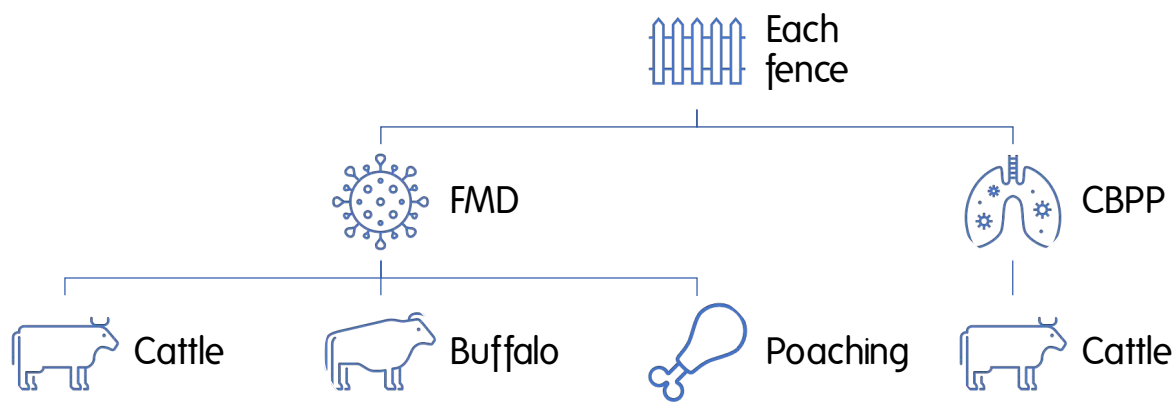
Results of the assessment of Parameter 1	Result of the assessment of Parameter 2			
	Negligible	Low	Moderate	High
Negligible	Negligible	Negligible	Negligible	Negligible
Low	Negligible	Low	Low	Low
Moderate	Negligible	Low	Moderate	Moderate
High	Negligible	Low	Moderate	High

Proposed Fences



Map: AHEAD, non-public report

Individual Risk Assessments



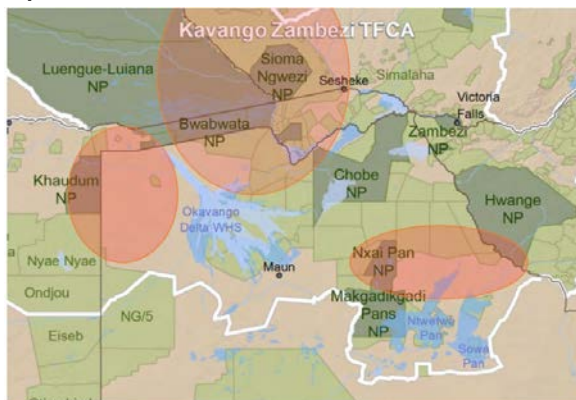
Baseline risk (status quo) vs. decommissioning + mitigation

A Unique Scenario for Risk Assessment

- Assessing non-zero baseline risk
- Risk in association with fencing vs importation
- Risk in a TFCA context



Map: AHEAD, non-public report



Map: AHEAD, non-public report, adapted from Peace Parks Foundation

Livestock, Wildlife and Resilient Livelihoods in the Kavango and Zambezi Regions Workshop (September 2022)



2022 Engagements

Gaborone – October 2022

- In-person meetings with DVS, DWNP
- Zoom meetings with DVS staff
- Introduction to key staff
- Discussion of the disease risk assessment purpose & approach

2022 Engagements

Maun – October 2022

- In-person meeting with ORI
- Zoom meeting with DVS
- Discussions on risk pathways, data sources, risk mitigation
- Received Ngamiland questionnaire survey data from ORI

Francistown – October 2022

- In-person meeting with DVS
- Discussion on risk pathways, data sources, risk mitigation

2022 Engagements

Maun – November 2022

- In-person meetings with DVS
- Data review of hard-copy records
- Received vaccination records, Ngamiland maps

Shakawe – November 2022

- In-person meetings with DVS
- Drove 140 km of the Zambezi fence & ~60 km of the Northern Buffalo fence with DVS colleagues from Shakawe to appreciate fence condition
- Received vaccination records, 2022 incursion reports, 2022 NAMBOT patrol reports, some crush coordinates

Zambezi Fence Conditions

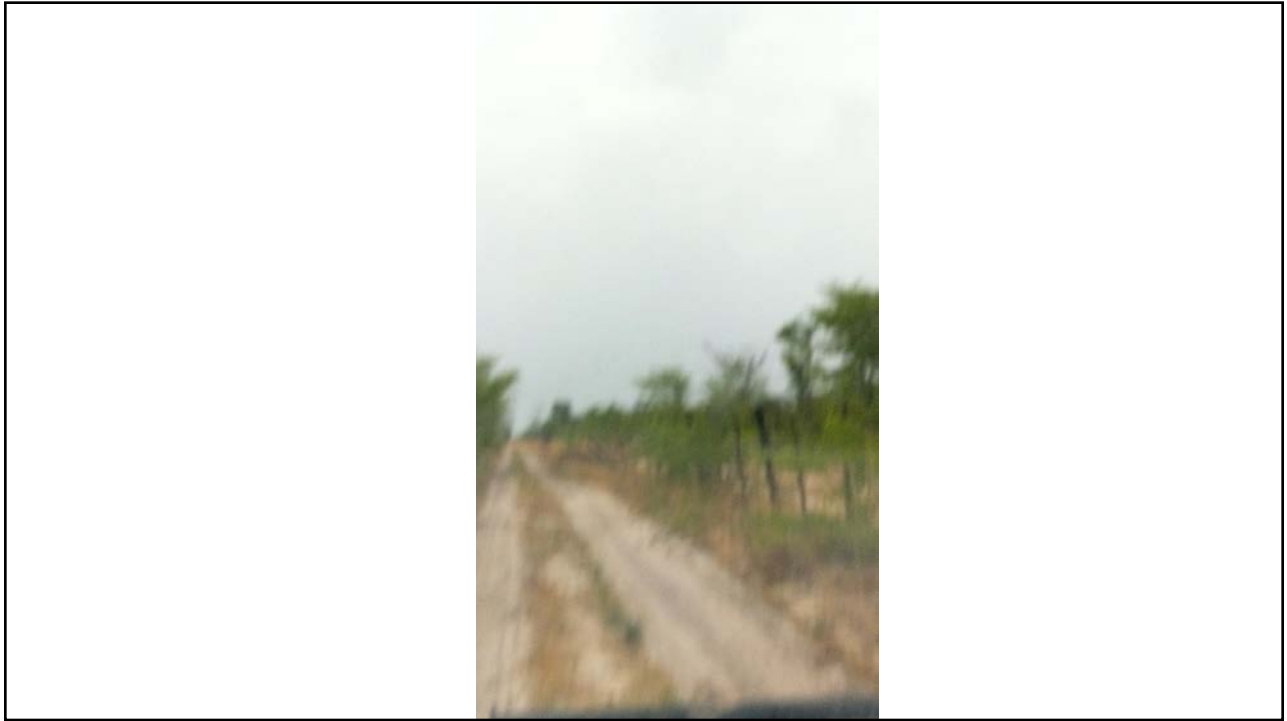


Zambezi Fence Conditions



Northern Buffalo Fence Conditions



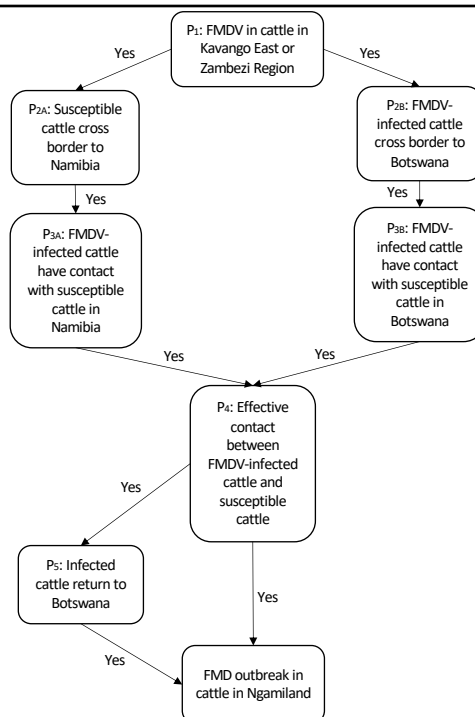


2023 Engagements

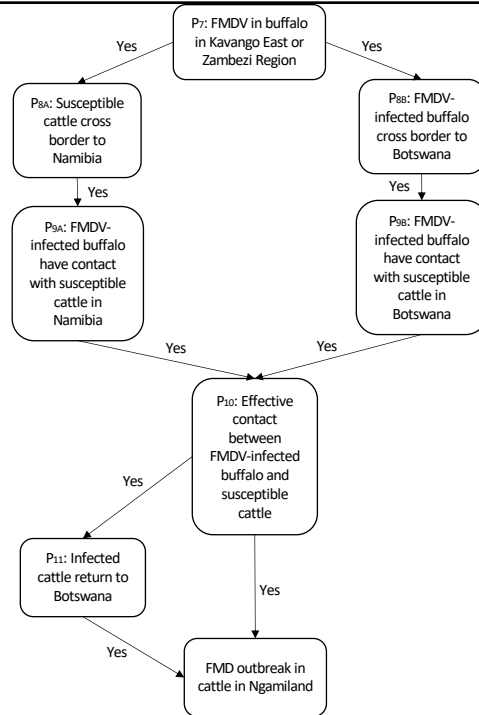
Virtual meeting – February 2023

- Zoom meeting with DVS, ORI, BVI
- Reviewed risk pathways
- Productive discussion on concerns about disease control, risk mitigation strategies, consequences of disease outbreaks

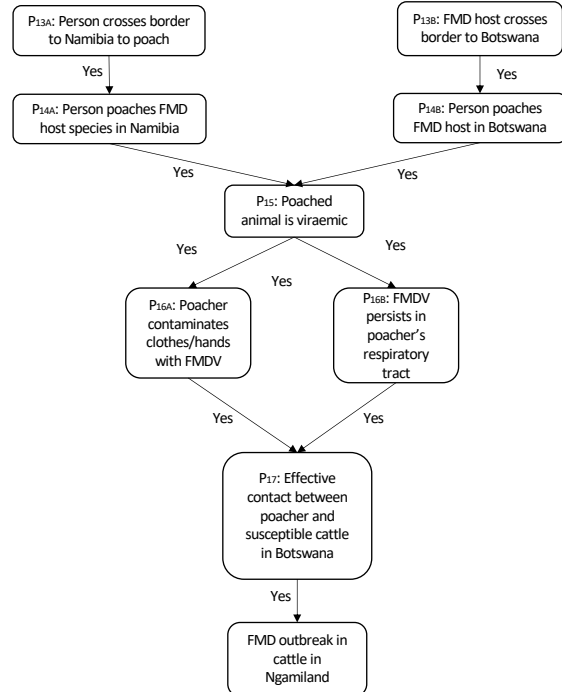
FMD: Cattle Risk Pathway



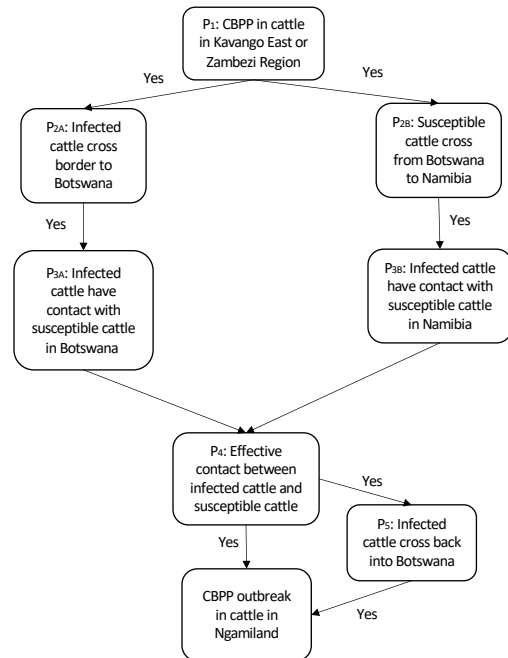
FMD: Buffalo Risk Pathway



FMD: Poaching Pathway



CBPP Pathway



Risk Mitigation

- Changes in herding practices (e.g., H4H)
- Increased surveillance
- Increased vaccination coverage near borders
- Field strain/vaccine matching, inclusion of type O

Way forward

- Engage in-person at AHSWG and in Kasane
 - Challenges in engaging with DVS colleagues
 - FMD outbreak in Botswana, CBPP outbreak in Namibia
 - Audits and other commitments
- Obtain last data sources
- Calculate risk for each pathway
- Develop final report