

GFRA Meeting, Hazeyview: 17-19 April 2012



The multi-sectoral impacts of FMD and its control in southern Africa

A story of unintended but unfortunate consequence for poverty alleviation, rural development & wildlife conservation in southern Africa

Elements of the problem

- International approach to FMD is geographic with the ideal of global or, at least, regional eradication
 - market access for animal commodities & products is (unnecessarily) dependent on disease-freedom
- SAT serotypes co-evolved with buffalo
 - most healthy buffalo populations maintain SAT viruses
 - comensal relationship
 - transmission from wildlife to livestock is inefficient
 - result: destruction of wildlife & a network veterinary fences some of which are ecologically disastrous
- Growing conflict between wildlife conservation & livestock development
 - both essential for balanced rural development
 - difference of principle makes them difficult to reconcile, i.e. the issue of 'connectedness' between populations

Transfrontier conservation area (TFCA) movement



People, wildlife & livestock live together in most TFCAs

TFCAs intended as multiple land-use areas

Livestock are traditionally pivotal to societies that live in TFCAs

So there is a need to reconcile wildlife conservation & livestock production & development

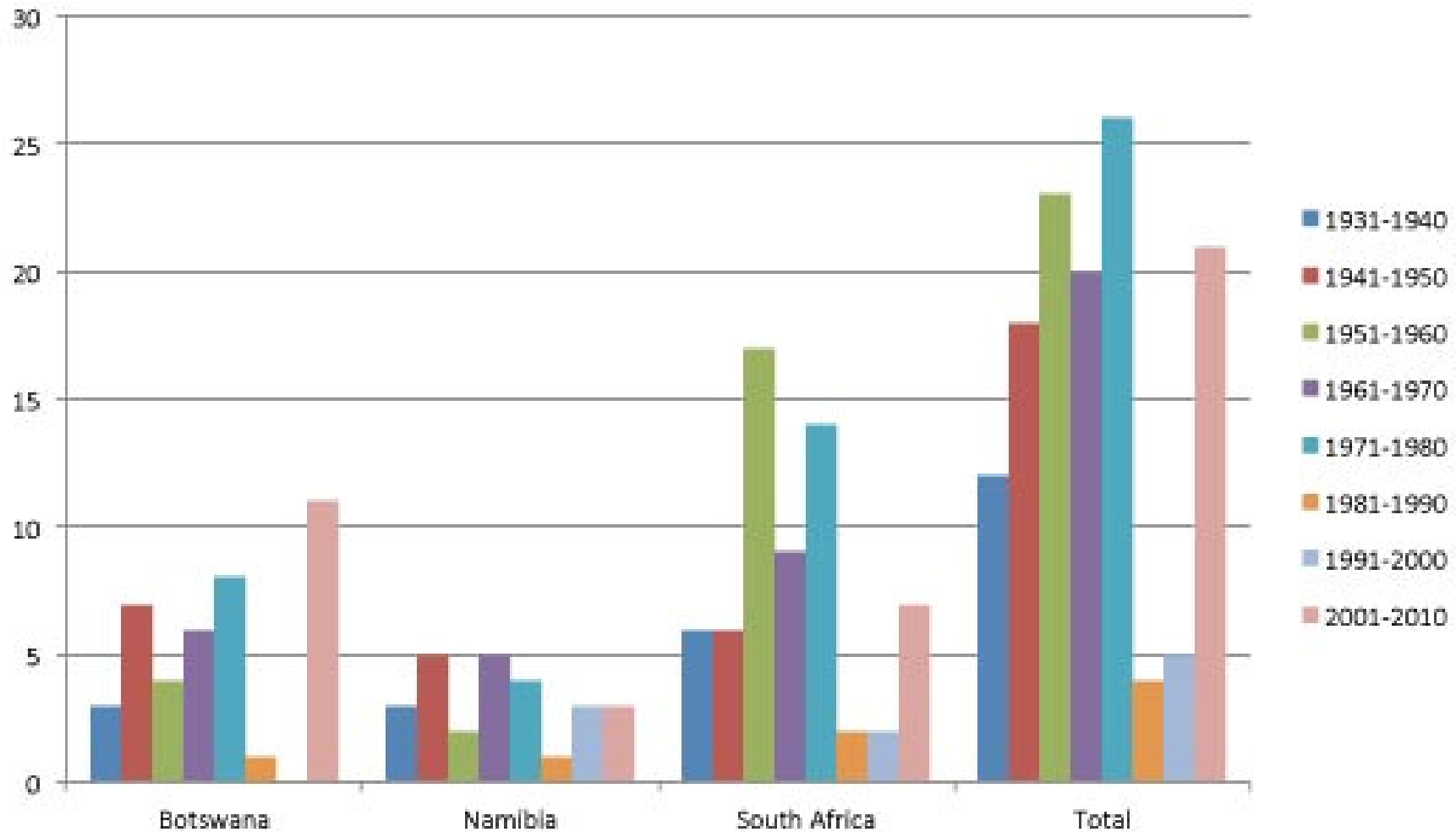
FMD control in southern Africa

Based on:

- Separation of livestock from infected wildlife populations (fencing the primary tool)
- Routine vaccination of cattle in high-risk areas (in & adjacent to infected buffalo populations)
- Movement control of susceptible animals & their products
- High levels of surveillance

How is FMD control in southern Africa progressing?

- Good from late 1970s to 2000
- Poor in last 10-12 years



Occurrence of FMD outbreaks in three southern African countries in the last 8 decades

Livestock production & trade in southern Africa

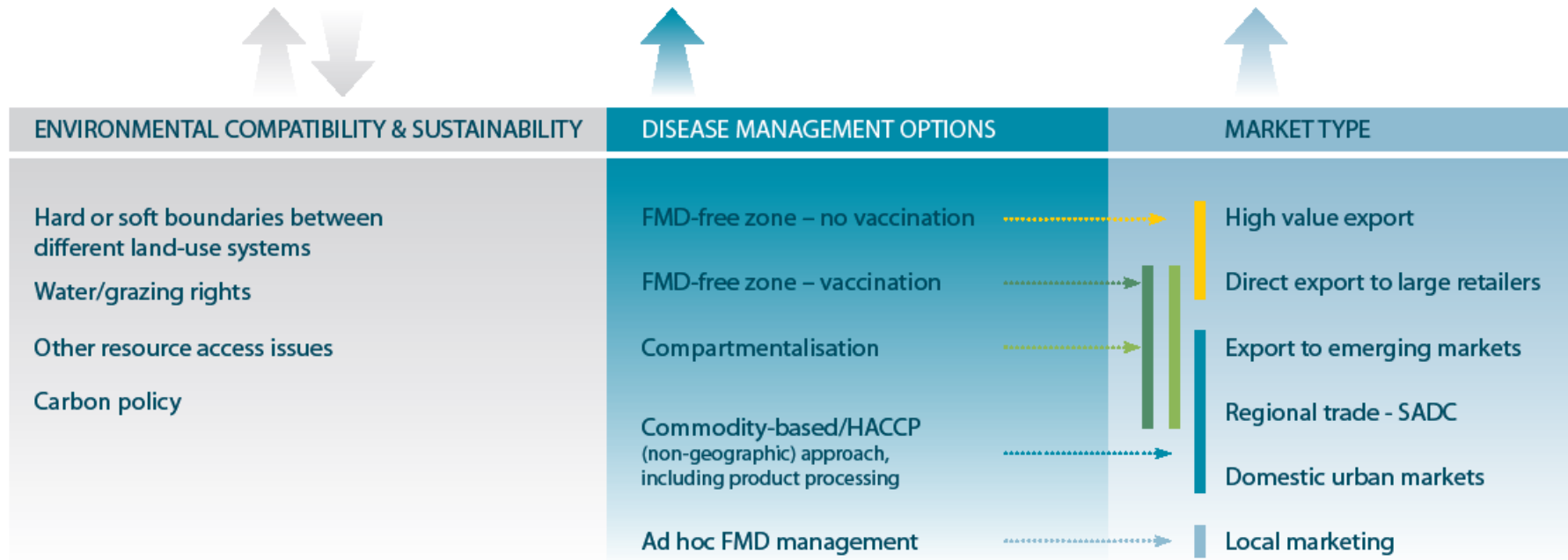
Most countries in southern Africa either already or aspire to export fresh or chilled beef into high value markets: essentially competitive situation

- However, beef production in the region is not internationally competitive – exports enabled by tariff protection (e.g. provisional EPAs signed by Botswana & Namibia)
- Improvement of competitiveness requires investment & adoption of modern farming methods
- But investment is dependent (among other things) on access to markets & prospects for a good return
- Market access is constrained by the current FMD rules (requirement for FMD-free zones) & situation
- Classic catch-22!

Commercialisation of livestock production



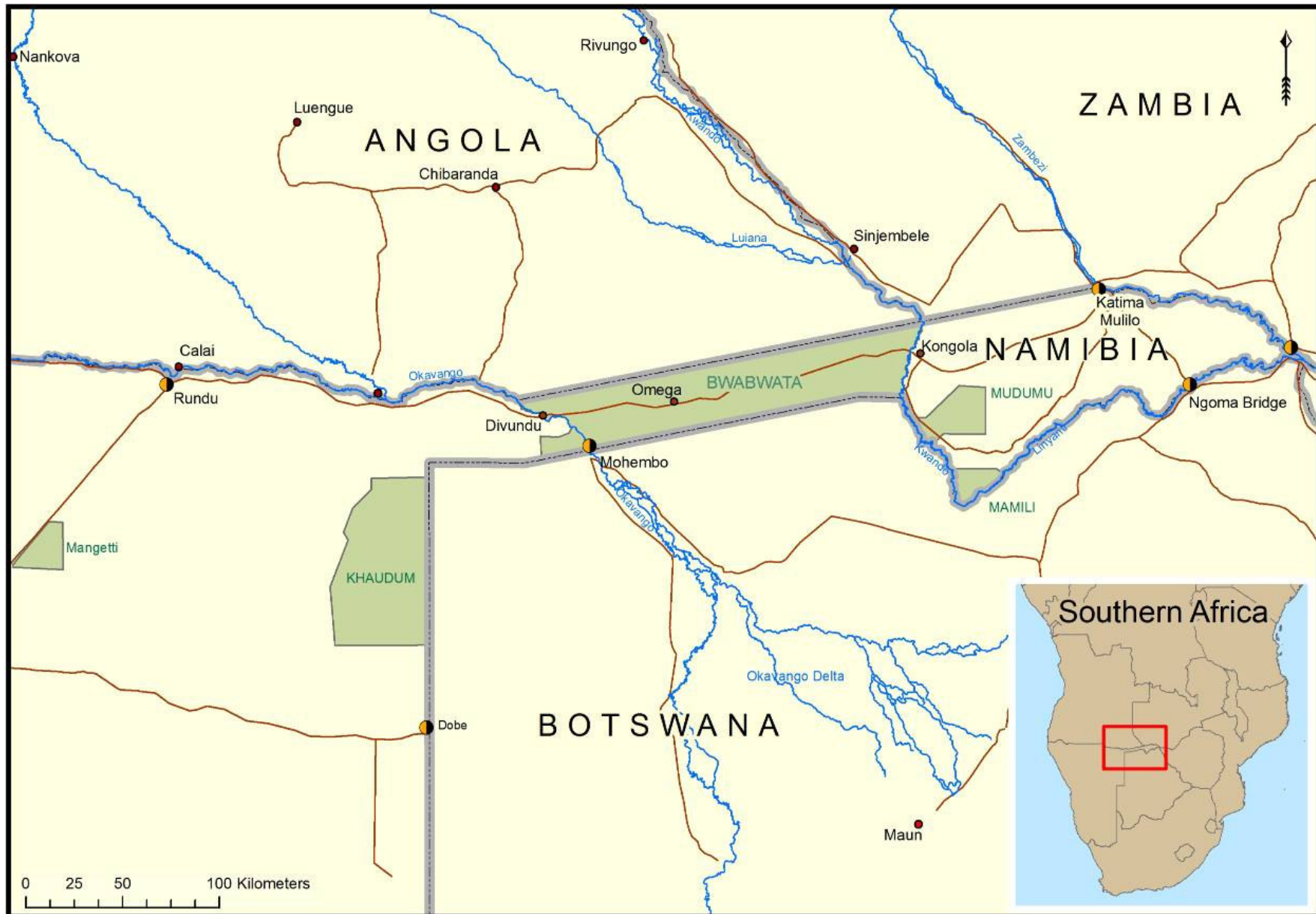
INTERACTING FACTORS DETERMINING MARKET ACCESS & COMPETITIVENESS



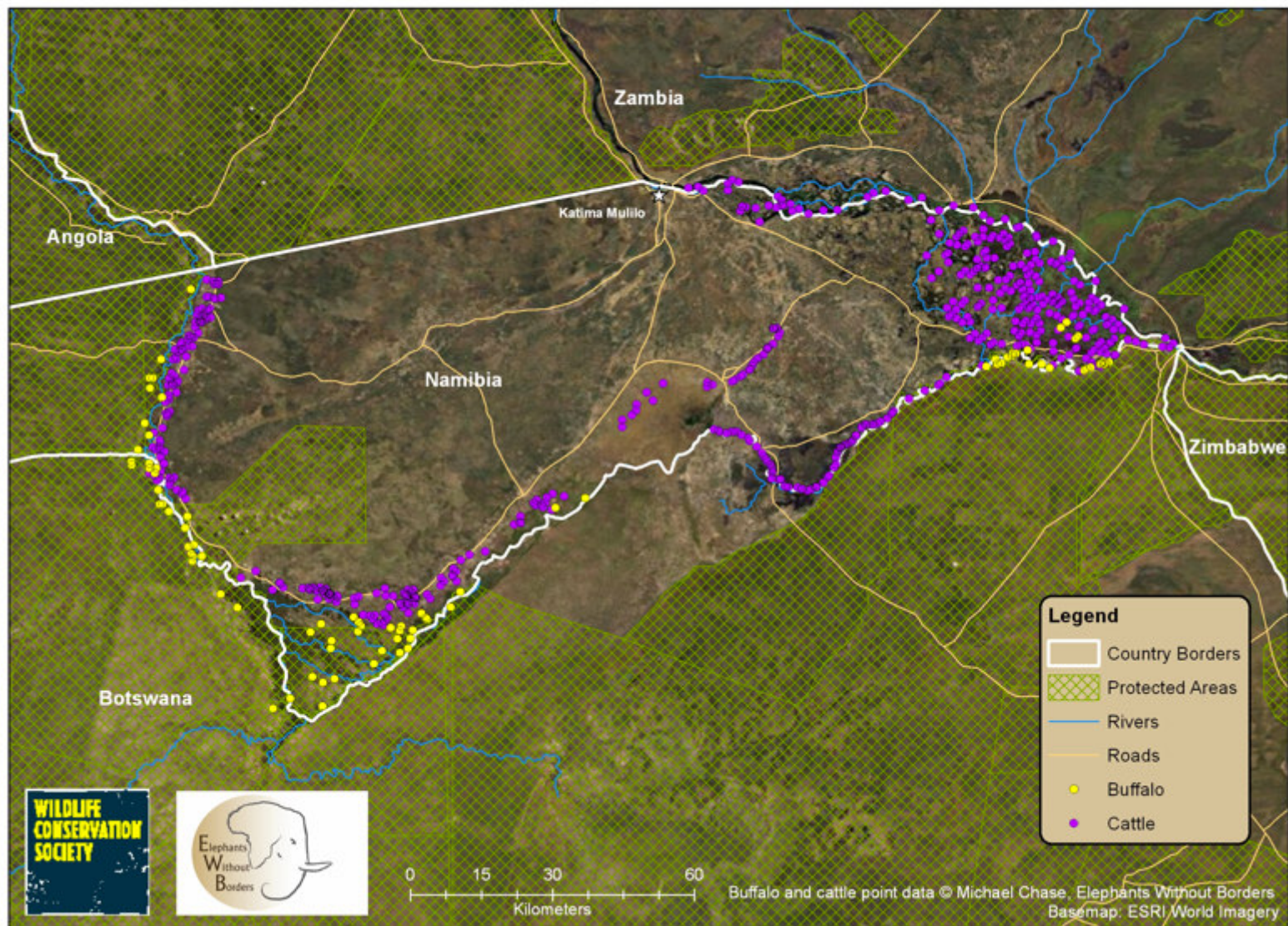
Let's look at a practical illustration: The Caprivi

- Geographically & ecologically complicated part of Namibia :
 - Exquisitely bio-diverse wetlands: core of the KAZA TFCA
 - Dense human population: Growing fast
 - Cattle population also growing fast: 60% increase in last 20 years, but productivity & animal quality not good
 - Well developed export-accredited abattoir & quarantine system: previously enabled export to RSA (now stopped)
 - Mentorship Programme for farmers to increase livestock productivity in place
 - On-going FMD control program based on vaccination
 - But every time there is a FMD outbreak the whole system comes to halt for 6 months
- ⇒ Hardship for all □ see DVD!

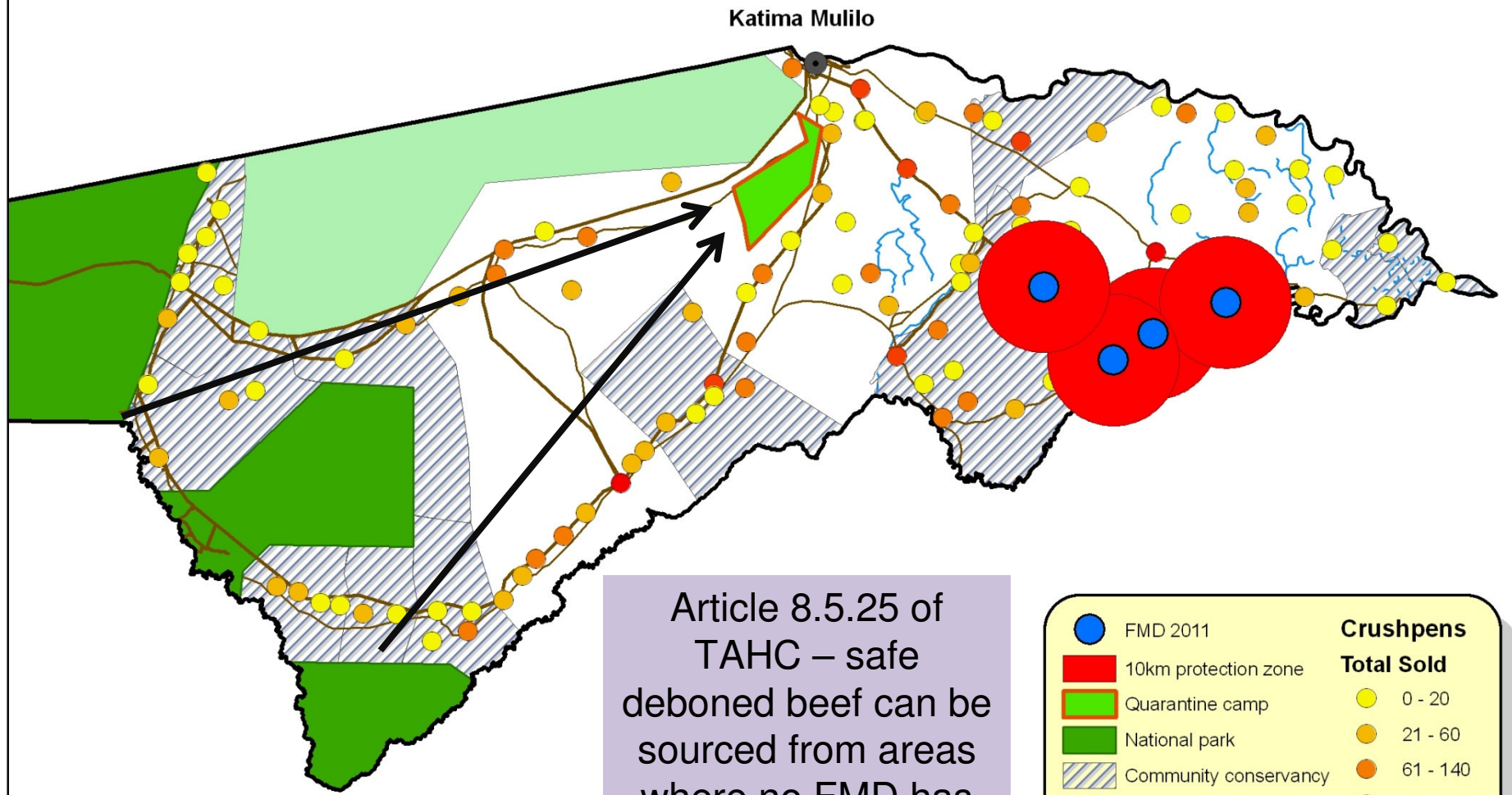
National Parks & river systems of the Caprivi



Distribution of Buffalo and Cattle in Caprivi, Namibia: 2009 Dry Season Aerial Census



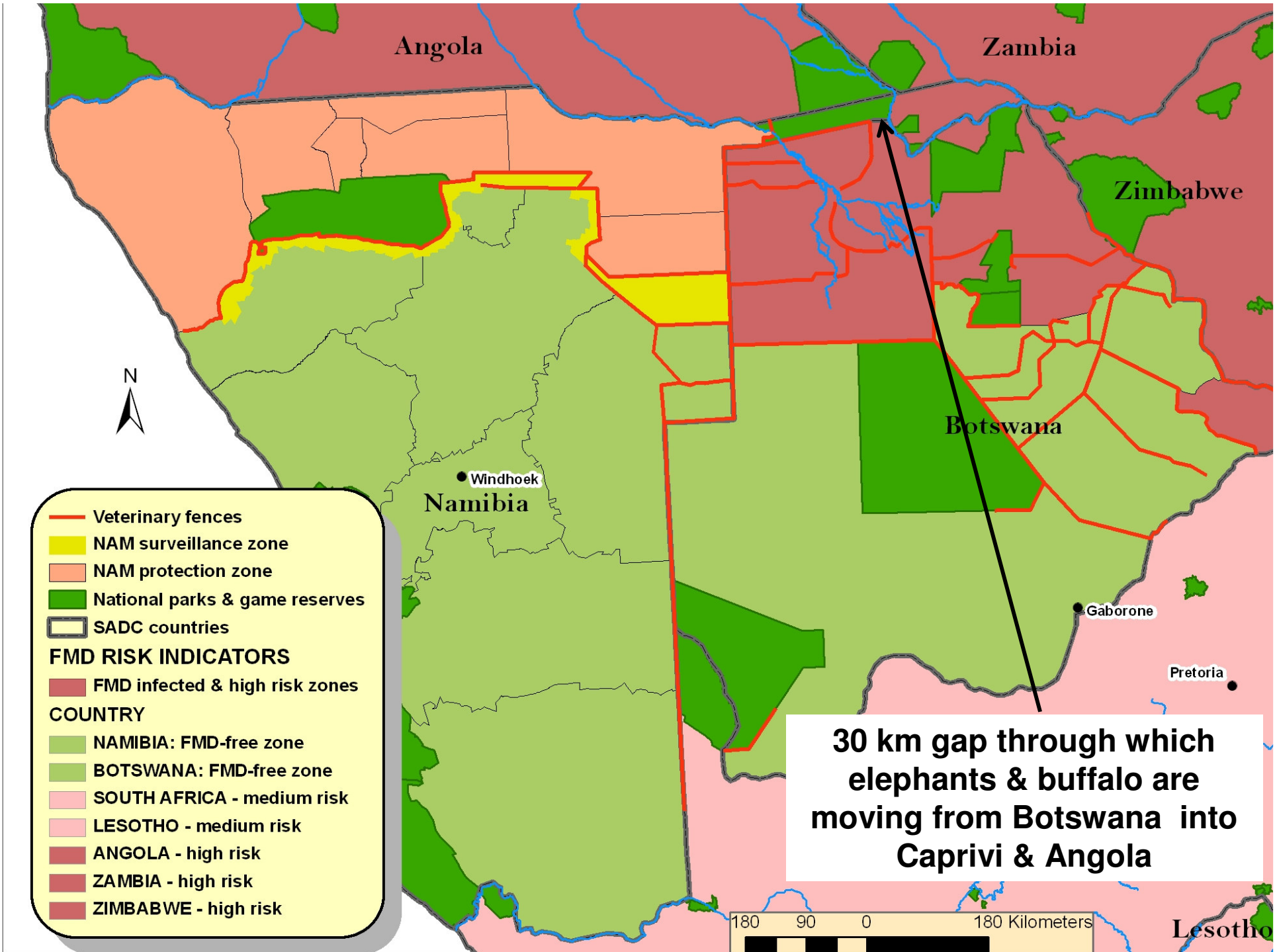
FMD outbreak: November 2011 - present



The bigger problem

How to integrate the human population north of the VCF into the agricultural economy of Namibia

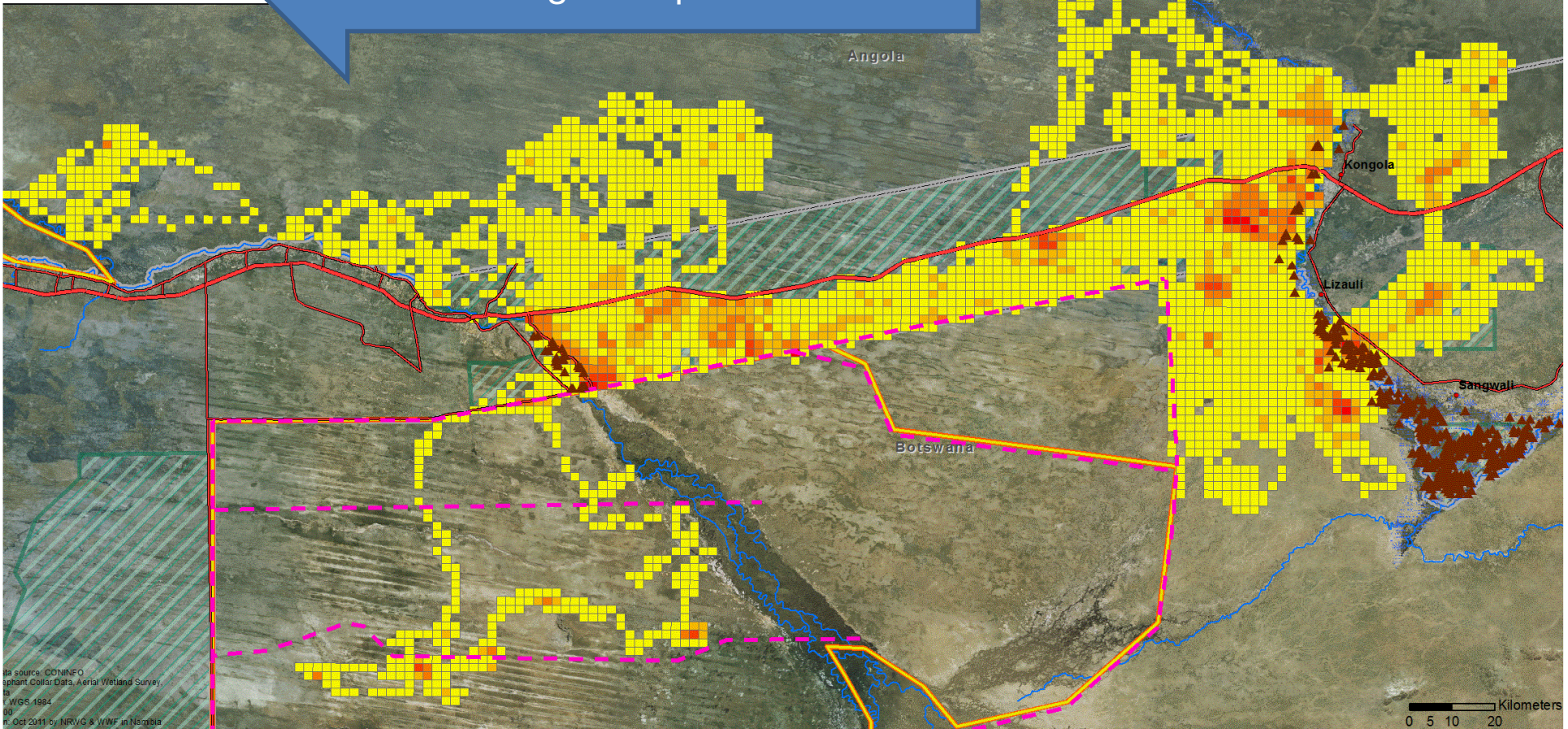
- the NCA contains >50% of Namibia's human and livestock populations
- excluded from formal marketing system
- significant political issue in Namibia



ELEPHANT COLLAR DATA
Distribution Map
Frequency of locations in 2 km by 2 km grid
Oct 2010 to end Oct 2011

- Settlements
- Elephant sightings during Caprivi game counts
- Frequency of Points**
- 50
- 100
- 1 - 200
- 1 - 300
- 1 - 445
- Veterinary Fences
- District road
- Trunk road
- Wetlands
- Rivers
- Local Boundary
- National boundary

Nothing to stop movement



Map source: COMINFO
 Elephant Collar Data, Aerial Wetland Survey,
 WGS 1984
 Oct 2011 by NRW & WWF in Namibia

Where does that leave us?

- Up a gum pole?
- Yes, unless we can gain acceptance for non-geographically-based international standards for trade in animal commodities & products
- Fortunately, the relevant ISSB (OIE) has in recent years begun to adopt such standards
 - they now exist for deboned beef & a number of other commodities (including live animals) & products
- Unfortunately, most veterinary services do not accept these standards
 - reasons not articulated other than being perceived as 'unsafe'/unacceptable

Where does that leave us (cont)?

- Most concerning is the draft of the new PCP-FMD
 - although it mentions non-geographic approaches there is pervading advocacy of zoning & zonation
- That is simply not compatible with the need for balanced rural development incorporating:
 - initiatives for poverty alleviation
 - conservation of wildlife & priceless wilderness areas
- Similar problems are playing themselves out in many parts of southern & eastern Africa

The team

- Meat Board of Namibia
 - Susanne Thalwitzer (Leader), Paul Strydom
- Meatco, Namibia
 - Cyprianus Khaiseb
- University of Pretoria
 - Jacques van Rooyen, Danie Jordaan, Mary-Lou Penrith, Gavin Thomson, Koos Coetzer
- Wildlife Conservation Society
 - Mark Atkinson, Steve Osofsky, Shirley Atkinson
- TAD Scientific CC
 - Gavin Thomson, Mary-Lou Penrith

Financial support

- Millennium Challenge Account (MCC, USA)
- Meat Board of Namibia