# BOTSWANA EXPERIENCE IN ESTABLISHING FMD FREE ZONES

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# LIVESTOCK DERMOGRAPHICS

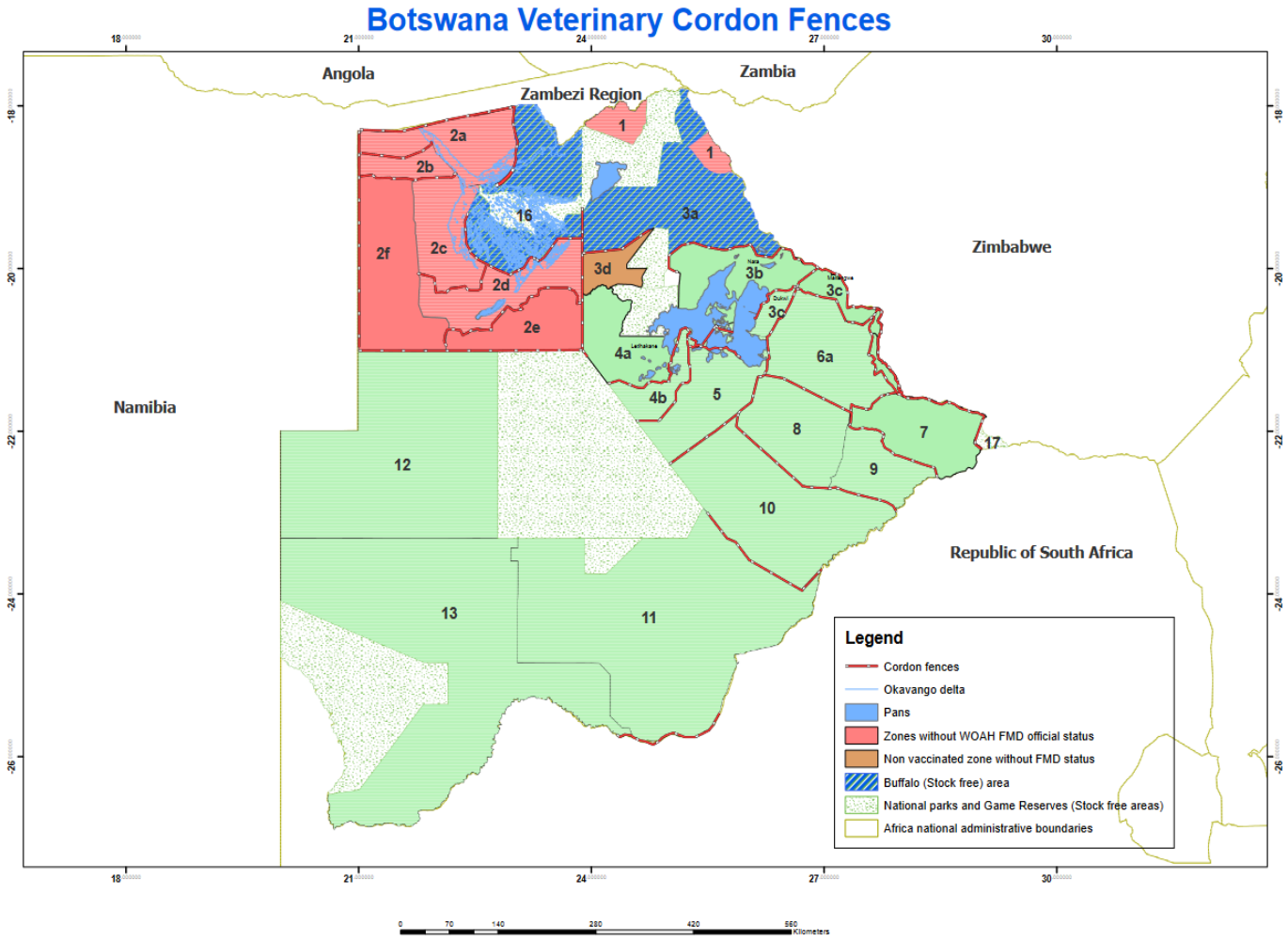



- Cattle – 1.9 million (2024)
- Goats – 1.2 million
- Sheep – 0.25 million
- Pigs-
- Predominantly extensive farming system
  - Communal grazing (unfenced) (80%)
  - Ranches (fenced farms) (20%)
  - Feedlotting
  - Dairy
- Botswana is largely flat country

# HISTORY OF ZONATION IN BOTSWANA

- Botswana carries a large population of African Buffalo (Syncerus caffer), which is a reservoir of the SATs virus serotypes of FMD
- This makes it difficult to control FMD and allow for trade in FMD susceptible species without separating them from buffaloes
- As a result, Botswana started erecting disease control fences in 1950s and continues to date.
- The aim of the disease control fences was to control FMD in order to meet the strict European Union export requirements for beef.

# DISEASE CONTROL FENCES




**Zoning primarily based on**:

- ❑ Physical separation through use of fences
- ❑ National Movement Protocol
- ❑ Individual Animal Identification (BAITS)

# BEFORE CONTAINMENET ZONE PRINCIPLE WAS INTRODUCED IN THE TAH CODE

- Botswana had FMD outbreaks in FMD free zones before introduction of the containment zone principle
- These oubreaks affected trade in the whole country for a long time, as the disease had to be controlled first before trade could resume. Such as the outbreaks ocurring in 2002 and 2003.

# ESTABLISHMENT OF A CONTAINMENT ZONE FOR THE CONTROL OF FOOT AND MOUTH DISEASE OUTBREAK TAHC 7.7.4

- Botswana first trialled the use of a containment zone priciple in 2011 FMD outbreak in a free zone.
  - ✓No time limit on recovery of Containment zone
- The containment zone principle was used again in 2022 FMD outbreak in an FMD free zone
  - ✓This time limit to recovery of the containment was 12 months

# ESTABLISHMENT OF A CONTAINMENT ZONE FOR THE CONTROL OF FOOT AND MOUTH DISEASE OUTBREAK 7.7.4 cont…

- The current on-going outbreak in one of Botswana's biggest FMD free zones is also being controlled using the containment zone principle
  - ✓The recovery period of the containment zone is 24 months this time

# KEY SUCCESS FACTORS WITH ZONING

- Availability of disease databases (Botswana Livestock Identification and Traceability System, LIMS).
- Availability of national surveillance plan.
- Availability of certified field officers for implementation of disease control plans up to village level.
- ISO 17024 national diagnostic laboratory with several accredited FMD tests and WOAH ref. Lab FMD
- Use of the Zonation system & movement by permit

# KEY SUCCESS FACTORS cont...

- Availability of an Agricultural University for research, post-graduate students and in-service students training in animal health.
- A clear line of command or hierarchy (Veterinary reporting Structure)
- Collaboration links with neighbouring countries at both Directorate and district levels
- Availability Movement protocols including import/export
- Availability of enabling legislation for enforcement

# KEY SUCCESS FACTORS cont...

- Availability of disease control infrastructure as double cordon fences and quarantine stations
- Full time veterinary presence at national borders for import inspections
- Availability of an Emergency Alert Team and Disease Control Committee
- Availability of FMD contigency plan
- Unwavering political will
- Availability of standard operating procedures
- Availability of a vaccine producing Institute

# Challenges and Solutions

| CHALLENGES | SOLUTIONS |
|---|---|
| | |
| Inadequate Financial resources/ economic melt down | -Use PPP model for resourcing controls, Donor<br>-FMD official control programme |
| Old legislation with weak penalties | Under review and updating |
| Slow Staff training | Use donor and partner agencies-FAO, WOAH,EU |
| Too few veterinarians for implementation of official controls | External recruitment and use of para-professions and private vets partnerships |
| High challenge on biosecurity systems (fences) by wildlife (elephants) and human vandalism | Elephant/Game friendly fences |
| Transboundary disease spread | Regional collaboration on controls e.g. vacc |
| Farm to fork trade requirement | BAITS |
| Absence of a communication strategy | Use of social media, broadcasting services as TV, Radios, Traditional platforms |

# ROLE OF PRIVATE PARTNERSHIPS

- In the past, disease control, including FMD was mainly a goverment responsibility, but with diminishing resources, this is changing
- In the current FMD outbreak, huge strides were made to use PPP approach to engage all industry players as farmers, food business operators, communities apparatus to participate in prevention and control efforts (Whole government and Community approach)

# ROLE OF PRIVATE PARTNERSHIPS cont...

- Areas of partnerships included
  - ✓Information dissemination (e.g. farmer associations, private radio stations etc)
  - ✓Monetary financial assistance (Business, corporate, Farmer Assoc, indivials etc)
  - ✓Inkind contributions as transport, fuel, food, technology as drones, GIS systems, communication systems, computers, disinfectants
  - ✓Free Manual Labour e.g. communities in fence construction

# ROLE OF PRIVATE PARTNERSHIPS cont...

- One major PPP approach is that of using communities to own cordon fences and lead in their maintence with goverment assistance, not the other way round. This is seen to be more sustainable in the long term and reduces goverment cost.

# ADVANTAGES OF ZONING

Makes it easier to control diseases step by step (FMD PCP)

- ✓Makes it possible to attain zonal FMD free status, one zone at a time, especially where resources are limited for countrywide surveillance (targeted disease control)
- ✓Early resumption of trade where containment zone used
- ✓Makes the implementation of containment zone principle more feasible
- ✓Can be easily done at low cost where there already natural barriers as rivers, mountains or road/rail barriers
- ✓Reduced psychosocial and wellfare ompacts on people and animals

# CHALLENGES OF ZONING

- Can be costly to establish, especially if barriers are to be constructed
- Requires good policy on movement controls
- Requires good surveillance system
- requires effective legislation
- Widlife and environmental conflict
- Requires access to diagnostic services
- Requires strong political will

# LESSONS FOR OTHER COUNTRIES

- Dossier Preparation: Not a theoretical document; Requires effective surveillance system, good working knowledge of the TAHC and manual, clear and comprehensive description of veterinary system, veterinary prevention and control measures, evidence of lab investigations and follow ups, evidence of legal enforcements, evidence of implentation of SOPs, informative maps,
- Stakeholder Trust: Transparency, reporting and open communication are essential cornerstones in dealing with stakeholders and trading partners.

# CONCLUSION & FUTURE OUTLOOK

- WOAHTAHC provides comprehensive options to facilitate countries to control FMD and gain FMD free status at zonal or country level or through compartmentatilisation principles.
- Botswana has through the years trialled some, such as protection zones, General zonation, compartments, containement zones and official control programs with good returns on investment.
- Disease control (FMD) requires an effective and well resourced veterinary service with good support through a PPP appreoach driven by strong political will
- Strong regional cooperation is indispensable to control FMD
- Diagnostic services are an essential and integral part of maintaining FMD free status
- The technical support provided by WOAH makes the load light if fully harnessed

# THANK YOU FOR LISTENING