



**Commodity-Based Trade of Beef and Enhanced Market Access:  
*The Vital Role of the Department of Veterinary Services***



**Gaborone, Botswana  
6-7 February 2018**

**WORKSHOP SUMMARY**

*A Department of Veterinary Services training workshop, in collaboration with the Animal & Human Health for the Environment And Development (AHEAD) programme, with additional support from The Rockefeller Foundation and the David R. Atkinson Center for a Sustainable Future.*



**Cornell University**  
College of Veterinary Medicine



**DAVID R. ATKINSON CENTER**  
for a Sustainable Future



**The ROCKEFELLER  
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## Disclaimer

*The contents of this report are the responsibility of the authors and do not necessarily reflect the views of the donor organizations who supported the meeting, or the views of our governmental and / or regional partners.*

## **ABOUT THE TOPIC**

For more information, please contact:

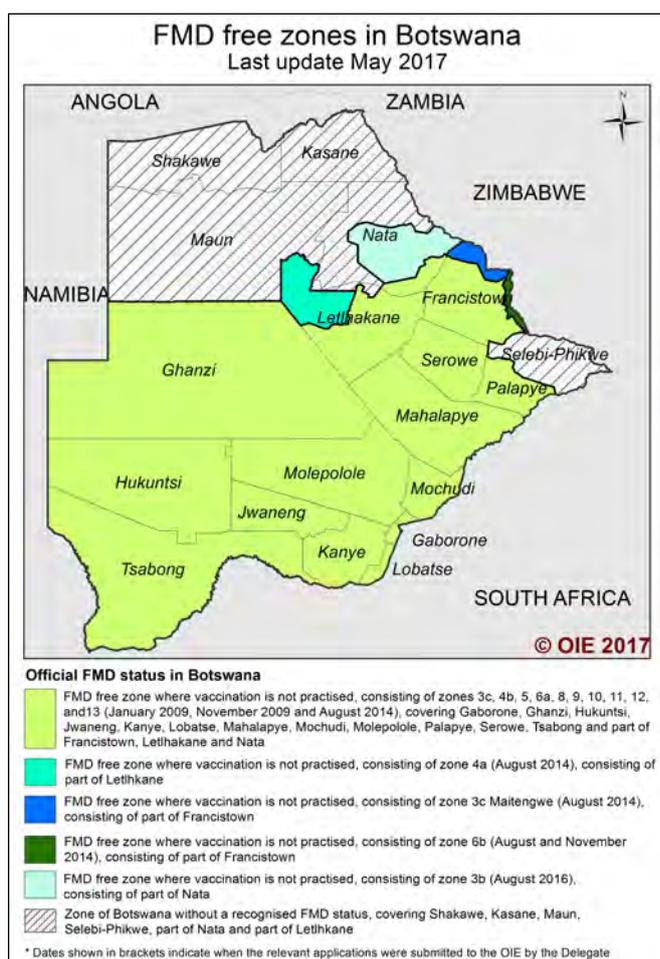
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## OVERVIEW

In 2018, the Government of Botswana's Department of Veterinary Services (DVS), in collaboration with Cornell University's AHEAD (Animal & Human Health for the Environment And Development) programme, hosted a training workshop entitled "Commodity-Based Trade of Beef and Enhanced Market Access: The Vital Role of the Department of Veterinary Services." Additional support was graciously provided by The Rockefeller Foundation and Cornell University's Atkinson Center for a Sustainable Future.

The workshop was held from 6-7 February at the Cooperative Training Centre in Gaborone, Botswana. It brought together over 60 participants including 40 senior DVS veterinary officers, other government stakeholders (from the Ministry of Agriculture and Food Security and the Department of Wildlife and National Parks); the Botswana Meat Commission (BMC); representatives from affected farming communities and the private sector; researchers, and colleagues from the World Organisation for Animal Health (OIE).

Both wildlife conservation and livestock agriculture are critical components of Botswana's economy. However, the prevalence of animal diseases – especially foot and mouth disease (FMD) – that can be transmitted between wildlife and livestock means that these sectors are often in conflict with each other. International trade standards for livestock commodities have historically required that production areas be free from FMD. This situation restricts market access and constrains the success of livestock owners who share the land with wildlife. In addition, attempts to meet international standards related to "freedom from disease" under currently applied policies for addressing FMD have had significant negative repercussions for free-ranging wildlife, largely related to disease control fencing.



Fortunately, new beef value chain-based approaches, known as commodity-based trade, have now been developed. These, accompanied by recent amendments to international standards for beef export from areas where wildlife maintain FMD viruses, could help resolve this conflict. Commodity-based trade (CBT) approaches focus on the safety of the beef production process, rather than on the animal disease situation in the locality of production. This food safety-type approach offers the potential for export of meat products that can be shown to be safe from animal diseases for importing countries, while also diminishing the need for at least some of the veterinary fencing currently aimed at separating livestock and wildlife.

The successful development of this approach in Botswana's non-FMD-free red zone (see OIE map - grey shaded areas) could provide a new opportunity for beef production that is compatible with wildlife conservation, yielding a 'win-win' for sustainable and diversified land use and livelihoods. However, while CBT-type approaches are apt for facilitating trade in FMD-endemic areas, the background

management of FMD (including disease outbreak response) needs to take the idiosyncrasies of South African Territories (SAT) serotype FMD into account and be designed to foster beef trade rather than hinder it.

In this context, the DVS training workshop provided attendees with the opportunity to better understand and evaluate:

1. how commodity-based trade of beef can be applied;
2. the diversity of technical elements and issues that impact FMD management; and
3. approaches to FMD outbreak response in Botswana’s FMD-endemic areas that don’t hobble the beef sector.

## WORKSHOP SESSIONS

PDFs of all workshop presentations are available at: [http://www.wcs-ahead.org/botswana\\_dvs\\_workshop\\_2018/agenda.html](http://www.wcs-ahead.org/botswana_dvs_workshop_2018/agenda.html). A “Summary of Breakout Group Sessions” is provided on page 5 below (also see Annex 1). Summaries of the “Reflections and Feedback” and “Key Next Steps” sessions are found on pages 5 and 6 below, respectively.

Additional resources are available at [http://www.wcs-ahead.org/kaza/kaza\\_additional\\_resources.html](http://www.wcs-ahead.org/kaza/kaza_additional_resources.html), including *Guidelines on Management of Foot and Mouth Disease Risk through Value Chain Approaches for Beef Exporting Enterprises in Southern Africa* (<http://www.wcs-ahead.org/kaza/170904-guidelines-for-implementing-cbt-final.pdf>) and a recently completed beef market analysis for Ngamiland ([http://www.wcs-ahead.org/kaza/171003\\_rpt\\_final\\_marketopportunitiesforcbtbeef\\_ngamiland.pdf](http://www.wcs-ahead.org/kaza/171003_rpt_final_marketopportunitiesforcbtbeef_ngamiland.pdf)).

**Please see the programme agenda below for the topics covered over the two days:**

COMMODITY-BASED TRADE OF BEEF AND ENHANCED MARKET ACCESS: THE VITAL ROLE OF THE DEPARTMENT OF VETERINARY SERVICES		
Gaborone, Botswana – 6-7 February 2018		
Arrival Day – 5 February 2018		
17:30	Registration	
Day One – 6 February 2018		
TIME	SESSION/ACTIVITY/PRESENTATION TITLE [SESSION CHAIR]	PRESENTER
7:30	Morning registration opens; tea & coffee available	
	<b>SETTING THE SCENE [Chair: L. Modisa]</b>	
8:00	Around the Room Introductions	
8:25	Purpose and Objectives of the Workshop	L. Modisa, S. Osofsky
8:40	Overview of Commodity-Based Trade (CBT) of Beef as an Opportunity for Botswana, with a Focus on Ngamiland	L. Modisa
8:55	Management of FMD in Botswana	L. Modisa
9:10	<i>Beauty and the Beef: Achieving Compatibility Between Wildlife Conservation and Livestock Production</i>	Film
9:25	TEA / COFFEE BREAK	
9:45	Principles of Commodity-Based Trade (CBT) of Beef	M.-L. Penrith
10:00	Q & A, Discussion	
	<b>SETTING THE SCENE (continued) [Chair: S. Osofsky]</b>	
10:20	What Has Changed? Practical Implications of 2015 Changes in the OIE Terrestrial Animal Health Code (Article 8.8.22) for Beef Producers in Northern Botswana	M. Letshwenyo

10:35	Approaches to Quarantine, and Thoughts on Managing Outbreaks with Minimal Disruption of Beef Trade in the CBT Context	M. Letshwenyo
10:50	A Perspective from BMC: Market Liberalization and the Importance of Approaches to Outbreak Response that Support CBT	B. Mogome-Maseko
11:05	Beef Processing and the Role of Maturation in Ensuring a Safe Product	B. Mazhani
11:20	A Livestock Farmer's Perspective on What Success Looks Like in Ngamiland	M. Masedi
11:35	A Private Sector Perspective	K. Seisa
11:50	Q & A, Discussion	
12:05	GROUP PHOTO, and LUNCH	
	<b>SETTING THE SCENE (continued) [Chair: L. Oarabile]</b>	
13:05	Overview of Updated (2017) "Guidelines on Management of Foot and Mouth Disease Risk through Value Chain Approaches for Beef Exporting Enterprises in Southern Africa" or Achieving Wildlife-Friendly, FMD-Free, Tasty and Wholesome Beef from Ngamiland	M.-L. Penrith
13:25	Unique Features of FMD in Southern Africa	G. Thomson
13:40	SAT-Serotype FMD Vaccinology	M. Mokopasetso
13:55	A Veterinary Perspective from Ngamiland, with an Emphasis on FMD Management	O. Thololwane
14:10	Q & A, Discussion	
14:25	TEA / COFFEE BREAK	
14:45	Breakout Groups: <b>DVS and the State of FMD Management: Introspection, Gap Analysis and Planning for the Future [Chair: S. Osofsky]</b> <i>Guidance on breakout group objectives will be provided, and each group will have an assigned facilitator and volunteer scribe. The groups will focus on three sets of questions:</i>  *Do we want CBT, is it relevant in the red zone? *What are the challenges / obstacles to CBT being achieved? *What do we need to implement CBT?	
16:30	Report back to plenary & discussion	
17:00	DAY 1 ADJOURNED	
18:00	GROUP DINNER – All Participants	

<i>Day Two – 7 February 2018</i>		
	<b>DVS, FMD, and CBT: Diving Deeper into Technical Elements [Chair: S. Atkinson]</b>	<b>PRESENTER</b>
8:15	Recap of Day 1	S. Osofsky
8:30	Active Surveillance for SAT-Serotype FMD: Elements of the Problem	G. Thomson
8:45	Q & A, Discussion	
8:55	The Importance of Auditing in FMD Control and, in Particular, for Vaccination Programs	M. Mokopasetso
9:10	Q & A, Discussion	
9:20	The Fundamental Requirements of Quarantine Stations, and Lessons Learned from the Pilot Project Conducted in Namibia's Zambezi Region	M.-L. Penrith
9:35	Q & A, Discussion	
9:45	More on Management of FMD Outbreaks in the context of Commodity-Based Trade	G. Thomson
10:00	Q & A, Discussion	
10:15	TEA / COFFEE BREAK	
	<b>Lessons Learned from Other Sectors and Other Countries [Chair: M. Mokopasetso]</b>	
10:45	Herding for Health: Implementation Lessons Learned from CBT in the Great Limpopo TFCA	J. van Rooyen
11:00	CBT Developments and Ideas from Other Parts of Southern Africa	G. Thomson
11:15	Mobile Kraals and Other Management Approaches to Human / Wildlife Conflict Mitigation	J. Isden
11:30	On Fences, Fauna, and FMD	S. Osofsky
11:50	Towards Alignment of Disease Management and Livestock Trade Promotion in Ngamiland	G. Thomson
12:10	Q & A, Discussion	
12:30	LUNCH	

13:30	<p>Breakout Groups: <b>Outlining a DVS Road Map for Facilitating CBT and Enhanced Market Access for Ngamiland [Chair: S. Osofsky]</b>  <i>Guidance on breakout group objectives will be provided, and each group will have an assigned facilitator and volunteer scribe. The groups will focus on three sets of questions:</i></p> <p>*Could DVS immediately improve its support for livestock commodity exports (both to the rest of Botswana and elsewhere)? If so, how? If not, why not?  *Could DVS improve the effectiveness of FMD management with currently available resources? If so, how? If not, why not?  *Are current FMD management practices in Ngamiland, including outbreak response, compatible with implementation of CBT and the need for minimal disruption of trade? If not, what would need to change?</p>	
14:30	Report back to plenary & discussion	
15:00	TEA / COFFEE BREAK	
15:30	Report back to plenary & discussion (continued)	
16:00	Reflections & Feedback	Panel TBD
16:20	Summary of Key Next Steps for DVS	L. Oarabile & L. Modisa
16:45	Closing Remarks	S. Atkinson & S. Osofsky
17:00	ADJOURN	

**Breakout Group Sessions** allowed attendees to explore issues and technical questions in greater depth. The same Groups worked together to address key questions on each day of the forum.

Day 1 Breakout Session:

***DVS and the State of FMD Management: Introspection, Gap Analysis and Planning for the Future***

- Do we want CBT, is it relevant in the red zone?
- What are the challenges / obstacles to CBT being achieved?
- What do we need to implement CBT?

Day 2 Breakout Session:

***Outlining a DVS Road Map for Facilitating CBT and Enhanced Market Access for Ngamiland***

- Could DVS immediately improve its support for livestock commodity exports (both to the rest of Botswana and elsewhere)? If so, how? If not, why not?
- Could DVS improve the effectiveness of FMD management with currently available resources? If so, how? If not, why not?
- Are current FMD management practices in Ngamiland, including outbreak response, compatible with implementation of CBT and the need for minimal disruption of trade? If not, what would need to change?

## Summary of Breakout Group Sessions

(Please see Annex for each Group's notes.)

Key themes that emerged from the breakout sessions were:

- There is overwhelming support for implementing CBT in the red zone. Opportunities afforded by establishing market access through CBT could improve local livelihoods and the economy, and reduce conflicts between the wildlife and livestock sectors.

- FMD outbreak response and protocols for implementing CBT need to be aligned. Market sustainability needs a reliable supply of beef, which requires a different approach to FMD outbreak response (e.g.- a blanket movement ban and shutdown after an outbreak is a major problem, particularly for attracting private sector investment). A plan needs to be developed and implemented that doesn't preclude trade across the entire area during an isolated outbreak. At the same time, better accountability of cattle movements by farmers is needed.

- There is a need to liberalize the export market and evaluate other specific constraints or gaps along the value chain, including quarantine / abattoir infrastructure and management, transport, and prerequisite protocols (e.g.- farmer compliance with good farming practices including herding).

- Effectiveness of FMD management could be improved by setting-up a dedicated FMD coordination unit / team, with a dedicated budget, within DVS; and by conducting more local research to understand FMD specifically within Botswana.

- Awareness-raising, training, and education are required at all levels. Farmers need to be educated to understand the requirements to ensure field-based compliance critical for accessing desirable markets. Markets and potential trade partners need to be educated to understand that CBT is a safe approach for managing risk from FMD. DVS staff require further capacity development – there is currently limited understanding of the CBT concept, and implementation will require a mindset change and a focus on CBT as a priority.

- Communication and collaboration emerged as critical to long-term implementation success (e.g.- within DVS, between DVS and farmers, and with the private sector). Wide stakeholder consultation is needed to delineate roles and responsibilities, build trust, and ultimately drive CBT forward.

## REFLECTIONS AND FEEDBACK

During a final panel discussion, a number of workshop participants offered reflections on the deliberations and the work to come:

Dr Kealeboga Botlhole (Principal Veterinary Officer, Kgalagadi District) noted with concern that livestock is currently only contributing 2.6% to the country's GDP. He went on to state that there was a legitimate need to implement CBT of beef, with a focus on Ngamiland, given the number of cattle in the district – which can only be done by marketing CBT products. In this regard, the private sector needs to be allowed room to play their part. He stressed that CBT should not be considered as a substitute for FMD control, but rather, good FMD control should be a pre-cursor to CBT. More research was also required on FMD and associated issues. He also encouraged the trial of mobile abattoirs in the country.

Ms Baitsheni Babusi-Hill (District Agricultural Coordinator, Ministry of Agricultural Development and Food Security) stressed the need for and benefit of greater collaboration and engagement with a broader range of stakeholders. She appreciated the critical role of BVI in managing FMD and noted that FMD cannot be eradicated but that it can be managed, with support from the farmers.

Dr Emmanuel Adom (Principal Veterinary Officer, VEES) noted the need for a change in the way in which things were being done within the department, and the need to work more closely as a team, for broader stakeholder engagement to ensure greater buy-in into the CBT concept. He particularly noted the opportunity for the public and private sectors to work more closely together. He also noted that CBT was already being practiced as products from Ngamiland were being sold in neighbouring countries, but that this needed to be intensified. He emphasized the need to engage regional and international bodies such as SADC and the OIE in order to implement CBT successfully.

Dr Letlhogile Oarabile (Deputy Director, DVS) hoped that, going forward, the knowledge gained through the workshop would mean that any future outbreaks of FMD would not need to be accompanied by trade disruptions. He called for a review of existing fences to determine if all were necessary, given the overwhelming costs of fence maintenance. He further agreed that the country's private veterinary services were a resource to be tapped into.

## **KEY NEXT STEPS**

On behalf of DVS, Dr Letlhogile Oarabile outlined the following steps moving forward:

- Review of the FMD strategy for Ngamiland
- Separation and normalization of the Makalamabedi quarantine station and AI camp
- Capacity-building of officers responsible for quarantine
- Mobilisation of resources to rehabilitate quarantine stations so that Ngamiland cattle can be taken to Francistown
- Resuscitation of the Ad-Hoc Committee on Fencing (AHCOF) so as to foster agreement across government departments as well as to ensure a common country position at KAZA TFCA meetings
- Review of the relevance of the various fences to inform a reconvening of the AHCOF

Dr Letlhogile Modisa encouraged the country's Veterinary Services personnel to come out of their comfort zones, to contemplate and understand the innovations presented during the workshop, and to implement the principles learnt at the workshop immediately. He reminded staff that their primary mandate was to be the custodians of the nation's animals (domestic and wild) and as such, ensure animal health and welfare.

Shirley Atkinson outlined the following next steps with regards to AHEAD's support on implementing CBT of beef:

- Upload the agenda, presentations, photo gallery, participant list and breakout group session summaries (the latter with approval of DVS) onto the AHEAD website for access by participants
- Facilitate a gap analysis for the implementation of CBT of beef in Ngamiland with a group of technical experts, with a preliminary report prepared by the end of 2018
- Provide technical assistance, if requested, to DVS on reconciling their FMD management strategy and a CBT approach to beef production
- Provide technical assistance, if requested, to DVS on continuing to think through FMD outbreak response as it relates to CBT
- Facilitate and encourage the establishment of a "wildlife-friendly beef" stakeholder forum for improved collaboration and dialogue in Maun

- With partners, work with communities in Ngamiland to increase understanding of CBT and the role farmers need to play in implementing CBT, starting with a field visit to Habu and Gumare on 10-12 February 2018
- Support the resuscitation of Botswana’s Ad Hoc Committee on Fencing (AHCOF), if AHEAD support would be helpful
- Support reconvening of the KAZA Animal Health Sub-Working Group, which brings together the Directors of Veterinary Services and Senior Veterinary Officers from wildlife departments from each partner country, along with other relevant stakeholders – to hopefully have their first meeting in 2018

Before the training was adjourned, all workshop participants received certificates of attendance.

Breakout group outputs and a list of participants are provided in the Annex section below.



*Participants at the training workshop, Gaborone, Botswana*

## **ANNEXES**

- Annex 1: Breakout Group Outputs  
Annex 2: List of Participants

## **ANNEX 1: BREAKOUT GROUP OUTPUTS**

## BREAKOUT GROUP 1

### **Do we want CBT, is it relevant in this area?**

- Yes, it is relevant due to market constraints currently experienced by red zone farmers.

### **What are the challenges / blockages to CBT being achieved?**

- Current FMD outbreaks and outbreak response. However, if CBT is working, then this will become less relevant.
- Farmer compliance, e.g. good farming practices including herding, etc.
- Limited DVS capacity – staff & resources. There is currently a limited understanding of the CBT concept, and implementation would require a mindset change and focus on CBT as a priority.
- Market access – poorly coordinated approach to market & BMC monopoly

### **What do we need to implement CBT?**

- Remove BMC monopoly (and replace with licensing / regulatory authority)
- Compliance with & enforcement of the value chain approach
- Infrastructure that supports CBT
- Support from organisations at the local, regional and international level
- A dedicated driving force

### **Could DVS immediately improve its support for livestock commodity exports (both to the rest of Botswana and elsewhere)? If so, how? If not, why not?**

- Yes, but some procedures need to be addressed first.
- A guiding document for the implementation of CBT is required.
- FMD outbreak response & CBT implementation protocols need to be aligned & formalized.
- Trade partners need to be engaged and agreements on export products need to be promoted, although there's a lack of clarity about whose responsibility tradeable products are.
- Raise awareness in farmer community.

### **Could DVS improve the effectiveness of FMD management with currently available resources? If so, how? If not, why not?**

- Yes (and no, as it depends on which aspect of FMD management is under consideration)
- Review the vaccination strategy, making it more strategic and risk-based.
- Appoint a dedicated FMD team to improve on outbreak response and control of FMD.
- Certain aspects of FMD management need more resources, such as animal movement control.
- Outsource fences to improve their efficiency.

### **Are current FMD management practices in Ngamiland, including outbreak response, compatible with implementation of CBT and the need for minimal disruption of trade? If not, what would need to change?**

- No (and yes, for some instances, DVS is ready e.g. quarantines, but not when there is an outbreak). [Editor's note: It's not indicated which quarantine facilities are currently ready.]
- Movement protocols need to be reviewed.
- Closure of abattoirs needs to be reviewed – question around whether they need to be closed at all, and if so, then ideally for a limited time such as during the investigation period.

- Both of the above need to be aligned with the CBT approach.
- Prepare for certification strategies and technologies in-line with CBT.

## BREAKOUT GROUP 2

### **Do we want CBT, is it relevant in this area?**

- Yes
- It offers the opportunity to export to other markets for areas that will never be free of FMD.
- It has the potential to impact and improve local livelihoods and economies.
- Reduces conflicts between the wildlife and livestock sectors.

### **What are the challenges / blockages to CBT being achieved?**

- Dilapidated infrastructure
- Lack of resources
- The current outbreak response
- Quality of the animals
- Farmer compliance
- Lack of established markets for CBT products
- The relationship between the farmers and DVS is currently very poor; trust has broken down over the years.
- Slaughter throughput in the existing abattoirs is insufficient.
- Animal price is significantly lower and acts as a deterrent to farmers.

### **What do we need to implement CBT?**

- Aligned and enabling legislative / policy framework
- Stakeholder consultation to improve relationships
- Improved infrastructure – quarantines, feedlots and biosecurity points – for which funds are required
- Actively secure markets for CBT products.
- Review movement protocols for direct slaughter outside the red zone.
- Improve animal husbandry practices to get quality beef.
- Improve road networks so that farmers can be reached, and so they can bring their animals to abattoirs.
- Advocate for CBT with political and traditional leadership.
- Liberalization of the export market, abattoirs, transport, and so forth
- Review of land allocation policies for potential farmers

### **Could DVS immediately improve its support for livestock commodity exports (both to the rest of Botswana and elsewhere)? If so, how? If not, why not?**

- Yes
- Internal mindset change so as not to unnecessarily complicate trade conditions
- SOPs for CBT of beef are required – customise the existing guidelines for Ngamiland with stakeholder input
- Enabling / facilitating movement of animals from Ngamiland to Francistown for direct slaughter

<ul style="list-style-type: none"> <li>- Facilitate more abattoirs in Ngamiland.</li> <li>- Incorporate CBT message in extension work.</li> </ul>
<p><b>Could DVS improve the effectiveness of FMD management with currently available resources? If so, how? If not, why not?</b></p> <ul style="list-style-type: none"> <li>- Yes and no – need more resources</li> <li>- With current resources, could at least audit current vaccination programmes and develop strategy for the latter to be more risk-based</li> <li>- This needs to be coupled with a risk-based surveillance approach – anticipate further training would be required.</li> <li>- More local FMD research is required.</li> <li>- Prioritise existing resources towards critical interventions such as away from costly but ineffective fence maintenance.</li> <li>- Improve testing capacity of the labs to reduce turnaround time, especially during outbreaks.</li> <li>- Training of farmers &amp; herders on FMD management</li> <li>- Transport for DVS officers is required for passive and active surveillance.</li> <li>- Review of the Diseases of Animals Act with regards to farmers who are not presenting their animals for vaccination, and subsequent interpretation of the Act by DVS and police – currently differently interpreted</li> <li>- Submission of FMD control programme to OIE for endorsement</li> </ul>
<p><b>Are current FMD management practices in Ngamiland, including outbreak response, compatible with implementation of CBT and the need for minimal disruption of trade? If not, what would need to change?</b></p> <ul style="list-style-type: none"> <li>- The current outbreak response is NOT compatible with CBT.</li> <li>- Rehabilitate quarantines in Ngamiland.</li> <li>- Avoid doing blanket bans on movement (review movement protocols).</li> <li>- Review vaccination strategy.</li> </ul>

<b>BREAKOUT GROUP 3</b>
<p><b>Do we want CBT, is it relevant in this area?</b></p> <ul style="list-style-type: none"> <li>- Yes, but a pilot project is required to ensure that the entire value chain can be implemented.</li> <li>- Ensure ownership of the concept by the different stakeholders, which will also ensure compliance by farmers.</li> <li>- Explore markets but ensure compliance and protect the green zones.</li> <li>- Secure private sector funding.</li> <li>- Sustainable environment</li> <li>- Organised market</li> </ul>
<p><b>What are the challenges / blockages to CBT being achieved?</b></p> <ul style="list-style-type: none"> <li>- Lack of knowledge of CBT amongst DVS and other stakeholders – need the buy-in of the farmers</li> <li>- Market sustainability and good prices</li> <li>- Consumer confidence – educate consumers in the safety of the product, the benefit to rural communities, and the danger of fences</li> </ul>

<ul style="list-style-type: none"> <li>- Organized marketing</li> <li>- Policies that may not be aligned to CBT – remove BMC monopoly</li> <li>- Capacitation and buy-in of staff at DVS</li> <li>- Infrastructure deficiencies – quarantines, abattoirs</li> <li>- Traceability system needs to be strengthened.</li> <li>- Lack of written SOPs, HACCP plans at some abattoirs – will be required if these are to participate</li> </ul>
<p><b>What do we need to implement CBT?</b></p> <ul style="list-style-type: none"> <li>- Capacity-building both of DVS staff and of farmers</li> <li>- Public-Private Partnerships (PPPs) – requiring stakeholder collaboration</li> <li>- Research to reinforce the science that is already there</li> <li>- Dedicated team to do a risk analysis and marketing</li> <li>- Disease control infrastructure – ensure labs are able to do the right tests and that there is access to these labs</li> <li>- Improve diagnostic capability – residue testing</li> </ul>
<p><b>Could DVS immediately improve its support for livestock commodity exports (both to the rest of Botswana and elsewhere)? If so, how? If not, why not?</b></p> <ul style="list-style-type: none"> <li>- Yes</li> <li>- Develop a guiding document for processes from farm to fork – adaptable, site-specific.</li> <li>- A task force involving stakeholders is required to drive CBT.</li> <li>- Routes for transporting CBT products need to be secured – requires international / regional engagements.</li> <li>- Engage SADC Member States on the above and on the safety of the products.</li> <li>- Epidemiologist specific for CBT</li> <li>- Advocate for PPPs</li> </ul>
<p><b>Could DVS improve the effectiveness of FMD management with currently available resources? If so, how? If not, why not?</b></p> <ul style="list-style-type: none"> <li>- Yes, with additional resources and by re-prioritising human resources and in partnership with private sector</li> <li>- Increase effectiveness of FMD campaigns.</li> <li>- Engagement and transparency with farmers</li> <li>- Regular audits for vaccination campaigns</li> <li>- Improve internal communication flows (employ a communications strategy).</li> <li>- Improve legislation for it to be empowering.</li> <li>- Motivation for staff (training, communication and capacity)</li> <li>- Dedicated budget for FMD management</li> <li>- Coordinating agency for FMD, e.g. NACA (National AIDS Coordinating Agency)</li> </ul>
<p><b>Are current FMD management practices in Ngamiland, including outbreak response, compatible with implementation of CBT and the need for minimal disruption of trade? If not, what would need to change?</b></p> <ul style="list-style-type: none"> <li>- No, but improvement possible – if area of outbreak can be defined it can be compatible</li> <li>- Better accountability of cattle movement by farmers</li> </ul>

## BREAKOUT GROUP 4

### Do we want CBT, is it relevant in this area?

- Yes

### What are the challenges / blockages to CBT being achieved?

- All the stakeholders do not have the same understanding of the value chain.
- Lack of capacity (knowledge)
- Limited research on SAT viruses
- Competition for range resources affects the quality of the product.
- Lack of resources including quarantines and vehicles
- Lack of market liberalization (BMC monopoly)

### What do we need to implement CBT?

- Market liberalization
- Stakeholder buy-in to rangeland conservation
- Official control programme for FMD – endorsed and documented
- Research on SAT viruses
- Upgraded / new control infrastructure
- CBT task force

### Could DVS immediately improve its support for livestock commodity exports (both to the rest of Botswana and elsewhere)? If so, how? If not, why not?

- Yes
- Improve offtake to EU to allow for more Ngamiland beef to be absorbed by the domestic market in the green zone.
- Advocate for improved fodder production to help manage animal movement.
- Facilitate necessary infrastructure.

### Could DVS improve the effectiveness of FMD management with currently available resources? If so, how? If not, why not?

- Set up a dedicated FMD coordination unit.
- Intensify vaccination campaigns (avoid lapses and conduct farmer mobilisation and education camps).
- Develop vaccination programmes in consultation with farmers, so as to increase ownership of these.
- More research to enhance understanding of FMD in Botswana

### Are current FMD management practices in Ngamiland, including outbreak response, compatible with implementation of CBT and the need for minimal disruption of trade? If not, what would need to change?

- No
- After an outbreak, decisions need to be made more quickly to enable trade.
- The ground is set for CBT to be implemented. However, the confidence to actually implement seems to be lacking such that as soon as there's an outbreak, a blanket movement ban is implemented and it takes a long time for trade to resume.

## **ANNEX 2: LIST OF PARTICIPANTS**

**Commodity-Based Trade of Beef and Enhanced Market Access:  
The Vital Role of the Department of Veterinary Services**

6-7 February 2018  
Gaborone, Botswana

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