

GF-TADs

GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES

Africa

ZAMBIA



Food and Agriculture
Organization of the
United Nations



World Organisation
for Animal Health
Founded as OIE

African
Union 



SGE1 CBPP

Title

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ZAMBIA



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Presentation Outline

1. Legislation
2. Disease Control Policy
3. Compensation of farmers
4. Production of CBPP vaccines
5. Vaccine administration
6. Zoning
7. Use of antibiotics
8. Surveillance of CBPP
9. Estimated prevalence of CBPP in Zambia
10. Diagnostic Capacity
11. Views on endorsement by WOA of official eradication strategy
12. Cross border cooperation
13. Major Challenges and proposed solutions
14. Conclusion



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Legislation

- ▶ The legal framework governing the livestock sector with particular regard to CBPP control and general animal health includes the following primary legislation:
 - ▶ 1. The Animal Health Act No. 27 of 2010
 - ▶ 2. The Animal Identification Act No. 28 of 2010
 - ▶ 3. The Veterinary and Veterinary Para-Professions Act No. 45 of 2010



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CBPP Legislation

- ▶ In Zambia the system applied for official notification status (notifiable diseases) is based on The Animal Health Act No. 27 of 2010 under (Notifiable Diseases) Regulations, 2017
- ▶ This Regulation may be cited as the Animal Health (Notifiable Diseases) Regulation, 2017
- ▶ **List of notifiable diseases to be maintained by the Director**
- ▶ CBPP is a Notifiable disease and is listed in the notifiable diseases schedule.
- ▶ The Director of Veterinary Services notifies the public of some notifiable diseases through a gazette notice.



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Disease control policy on CBPP

- ▶ Following the endorsement of the National CBPP Eradication Strategy by the World Organisation for Animal Health (WOAH), the Policy of Government on CBPP is eradication of the disease from Zambia through testing and slaughter of all herds that test positive.
- ▶ Buffer zones will be maintained at border areas with neighboring countries where the disease is endemic to prevent re-introduction utilising vaccinations, erection and maintenance of Cordon lines, animal movement control, disease surveillance. Vaccination of cattle against CBPP in these areas is free.



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Compensation of farmers, willingness to pay (in case vaccines are not free)

- ▶ The Minister of Fisheries and Livestock may, by statutory instrument, regulate the procedure, criteria, type and determination of compensation to be given to any person under the Animal Health Act No. 27 of 2010.
- ▶ In order to ensure that compensatory funds are readily available and taking advantage of the safety of meat from CBPP infected carcasses, DVS has negotiated with abattoir facilities to be buying off carcasses from cattle slaughtered for CBPP eradication at prevailing market prices for beef and channel them into the food chain. The only parts that are condemned are those of the thorax that could have lesions.
- ▶ The buying off of the carcasses ensures that farmers are paid the market value of the cattle despite them being infected. This encourages farmers to comply. The farmers are usually paid within 48 hours of slaughter



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Compensation of farmers, willingness to pay (in case vaccines are not free)

- ▶ Further government provides 20% compensation of all slaughtered cattle in form of animals to the affected farmers



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Production (capacity) of CBPP vaccines

- ▶ The Animal Vaccines Production Unit at Central Veterinary Research Institute (CVRI) produces vaccines against the following diseases:
- ▶ Anthrax
- ▶ Black quarter
- ▶ Hemorrhagic Septicaemia
- ▶ Newcastle disease
- ▶ CBPP vaccines are imported as the country does not yet have capacity to produce the vaccine



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Vaccine administration as a percentage of the cattle population (at risk)

- ▶ The Department is implementing mass vaccinations in designated areas using T1/44. The actual vaccination is preceded with public awareness through sensitisation meetings, kraal visits, meetings with influential community members and public notices.
- ▶ Awareness is also done in schools and churches. Vaccination is conducted in the whole of the CBPP Infected Zone and in the CBPP Protection Zone.
- ▶ Mass vaccinations are conducted once a year in form of campaigns, where officers from the DVS conduct free vaccination of cattle in designated areas.



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Vaccine administration as a percentage of the cattle population (at risk)

- ▶ It is imperative that the vaccinations cover a minimum of 95% of the target population to ensure adequate numbers of the population building up immunity taking into consideration that the vaccines do not impart a 100% immunity to all the vaccinated individuals.
- ▶ The Department coverage has been between 87-95% of the target population. The vaccinations are usually done during periods of the year when the majority of the cattle are reachable with the terrain allowing passage



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Zoning or compartmentalisation strategies

- ▶ The implementation of the CBPP control and eradication plan is staged according to the defined CBPP zones in the country, which are classified by the level of risk of occurrence.
- ▶ The CBPP eradication plan for Zambia assumes a roll back strategy wherein the eradication process commenced in areas further away from the premised sources of the disease. In these areas, all efforts are directed to implementing measures that immediately remove all clinical cases of the disease in both known and potentially infected herds.

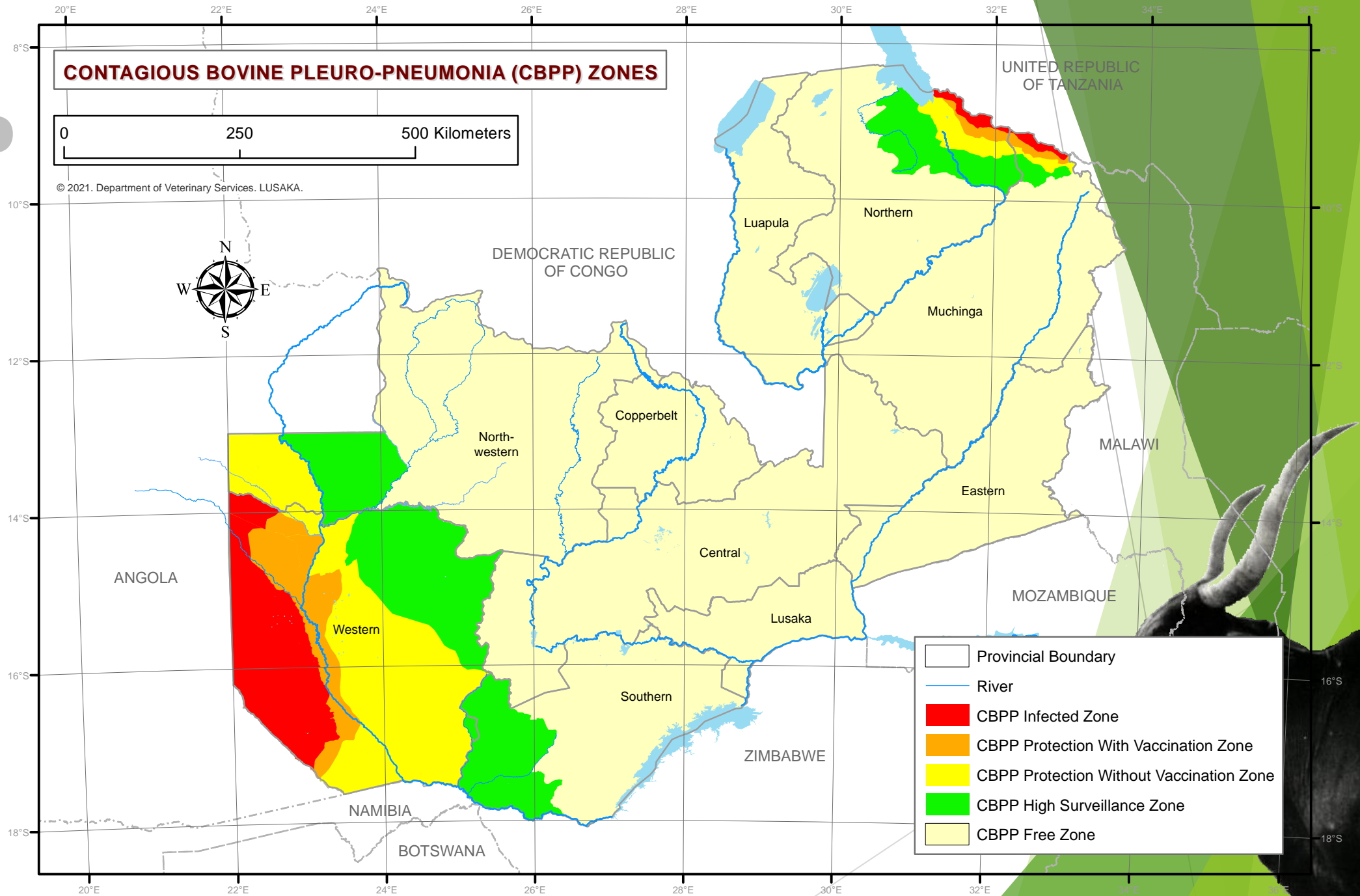


Zoning or compartmentalisation strategies

- ▶ In exercise of the powers of the Director of Veterinary Services pursuant to Section 22 Sub-sections (1), (2) and (3) of the Animal Health Act No 27 of 2010, CBPP areas have been divided into zones,
- ▶ The control areas are delineated into infected zone, Protection zone (subdivided into Protection zone with vaccination and Protection zone without vaccination), high surveillance zone and free zone.



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Use of antibiotics

- ▶ Treatment for CBPP is officially prohibited by the DVS in Zambia. This is because there is officially no scientific evidence that the use of antibiotics leads to cure of infected cattle.
- ▶ To ensure that farmers are not using antibiotics to treat CBPP, extension work has been done through community farmer groups and the delivery of such messages has continued.
- ▶ In addition, a Medicines and allied Substance act No. 3 of 2013 has been enacted that prescribed that antibiotics will only be handled by personnel with knowledge. This to ensure that such drugs are not miss-used.



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Surveillance of CBPP

- ▶ Clinical surveillance is conducted at farm level, abattoirs and slaughter slabs all over the country.
- ▶ At the farm level, surveillance is conducted through herd monitoring by Veterinary Assistants at individual kraals and farms, where basic operations are done such as running the animals to assess their ability to handle exercise, general wellness of the herds etc. The observations at these places are recorded and any suspicion of CBPP are followed by sample collection or even slaughter of the individual cattle showing such signs to conduct post-mortem for verification.
- ▶ Ante-mortem examinations are carried out at the abattoir or slaughter slabs. Post-mortem inspections are conducted on all carcasses to check for pathognomonic lesions, paying particular attention to those that showed signs of disease during ante-mortem.



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Surveillance of CBPP

- ▶ Any cattle found with lesions suggestive of CBPP are traced back to their origin. The findings are recorded on abattoir surveillance forms which are filed by the respective district. The veterinary office at the source is notified of the findings and an epidemiological enquiry is instituted by the district
- ▶ Due to the community extension messages delivered by the DVS on the signs and effects of CBPP, the farmers are usually on the lookout for the signs of the disease and report promptly to the authorities.



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Estimated prevalence of CBPP in Zambia

- ▶ Generally, the estimated sero-prevalence of CBPP becomes higher towards the northern border near Tanzania and the Angolan border in the west.
- ▶ In a study conducted in 2018 to ascertain the sero-prevalence of CBPP in Western and Southern Provinces, it was observed that the overall sero-prevalence of the disease was 2.75%.



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Estimated prevalence of CBPP in Zambia

- ▶ At District level, the highest sero-prevalence was in Shang'ombo District with 4.9% whilst the lowest sero-prevalence was in Kazungula District with 0.5%. When the herd prevalence was compared among the provinces, it was also found that Western Province had a higher herd sero-prevalence of 30.4% whilst Southern province had the lowest with 3.20% (Tables 3 and 4).
- ▶ Overall, the prevalence of CBPP in Zambia is estimated at 2.56% (0-5%) as determined from serological and abattoir surveillances. This prevalence is confined to the Infected Zone and the Protection Zone with Vaccination.



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Diagnostic capacity at the national reference laboratory,

- ▶ CBPP laboratory diagnosis is carried out within the country at the Central Veterinary Research Institute (CVRI), which is under the DVS in the Ministry of Fisheries and Livestock. This is the only CBPP-approved laboratory.
- ▶ The CVRI laboratory has capacity to do the following tests:
 - Molecular tests using conventional and real time PCR
 - Serological tests
 - Microscopy
 - Culture



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CBPP in international zoosanitary certificates (import, or export)

- ▶ The country endeavours to ensure that CBPP is not allowed to enter the country. This is done by ensuring that due diligence is done before imports of live cattle are allowed into the country.
- ▶ When DVS receives a request for import, conditions are prescribed. One of the key criteria is that cattle importation from CBPP infected countries is not allowed.
- ▶ Any person who wishes to import or export livestock, livestock products or livestock by-products into or out of Zambia must apply to the DVS for a veterinary import permit or an international sanitary certificate (export permit) respectively. A veterinary import permit and international sanitary certificate are legal requirements as stipulated in the Animal Health Act No 27 of 2010.



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CBPP in international zoosanitary certificates (import, or export)

- ▶ Import conditions are set for each import permit after carrying out import risk analysis. The import conditions are in tandem with national and international laws and standards. . The import risk analysis involves hazard identification and characterization, risk assessment, risk management, and risk communication. As part of assessing the risks for an import consignment, the WOAHA's World Animal Health Information Database (WAHID) Interface is used to assess exporting countries' disease status. In addition, other information sources such as media and contact with veterinary officials in exporting countries are used to complement the assessment of risks
- ▶ The veterinary import permit stipulates the conditions that must be complied with by the exporting country. All live cattle imports are quarantined for a minimum of at least 21 days and inspected by the DVS upon arrival in the country to ascertain compliance to import conditions. The quarantine is carried out at approved DVS quarantine facilities in the destination provinces under the supervision of DVS staff. After entry at the border post, the consignment may be subjected to further visual inspections and inspections of documentation during internal movement at veterinary road checkpoints. All imports are only allowed through the designated ports of entry which are manned by veterinary staff, table 12 and figure 12.



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Views on the endorsement of an official disease control programme by WOA, H,

- ▶ The WOA, H officially endorsed the Zambia National CBPP Control and Eradication Strategy at its General Session of the World Assembly of Delegates in May 2022.



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Cross-border cooperation

- ▶ Zambia has endeavoured to contact and create close collaborations with neighbouring countries.
- ▶ Zambia has formed bilateral committees with both Angola and Namibia where among the many issues that are discussed there, CBPP and other TADs take prominence .
- ▶ To further enhance coordination with these countries, bilateral meetings are held between veterinary authorities of these countries. At these meetings among the pertinent discussions that are held are control of movements between the common borders with these countries noting the prominent crossing points of livestock, the factors that influence the movement of cattle across the borders, education of the communities along the common border to ensure compliance to the laid down protocols for cattle movement, and designing protocols that would facilitate the movement of goods including cattle trade along the common borders without increasing the risk of disease transmission.



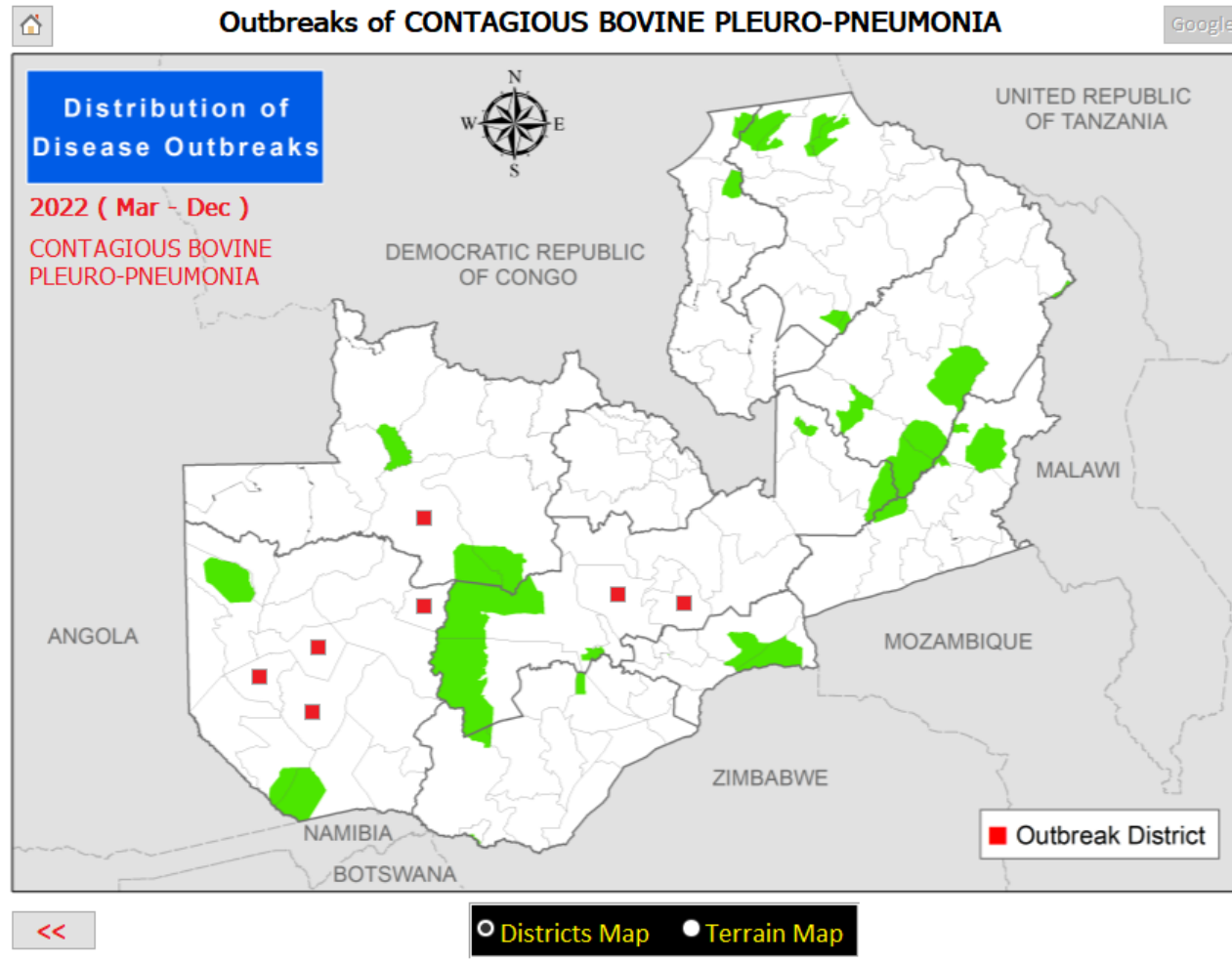
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Cross-border cooperation

- ▶ These bilateral agreements have identified a number of joint activities that have been carried out. During these meetings, the challenges of control of TADs are also identified and control measures recommended.
- ▶ This has led to signing a number of Memoranda of Understanding (MoU) with individual institutions or bodies that facilitate achievements of common good. Examples of such MoU are one with Istituto Zooprofilattico Sperimentale dell Abruzzo e Molise (IZS) and the other one with the Enhanced Research for Africa Network (ERFAN).



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Contagious Bovine Pleuro-pneumonia

2022 Mar Dec 2022

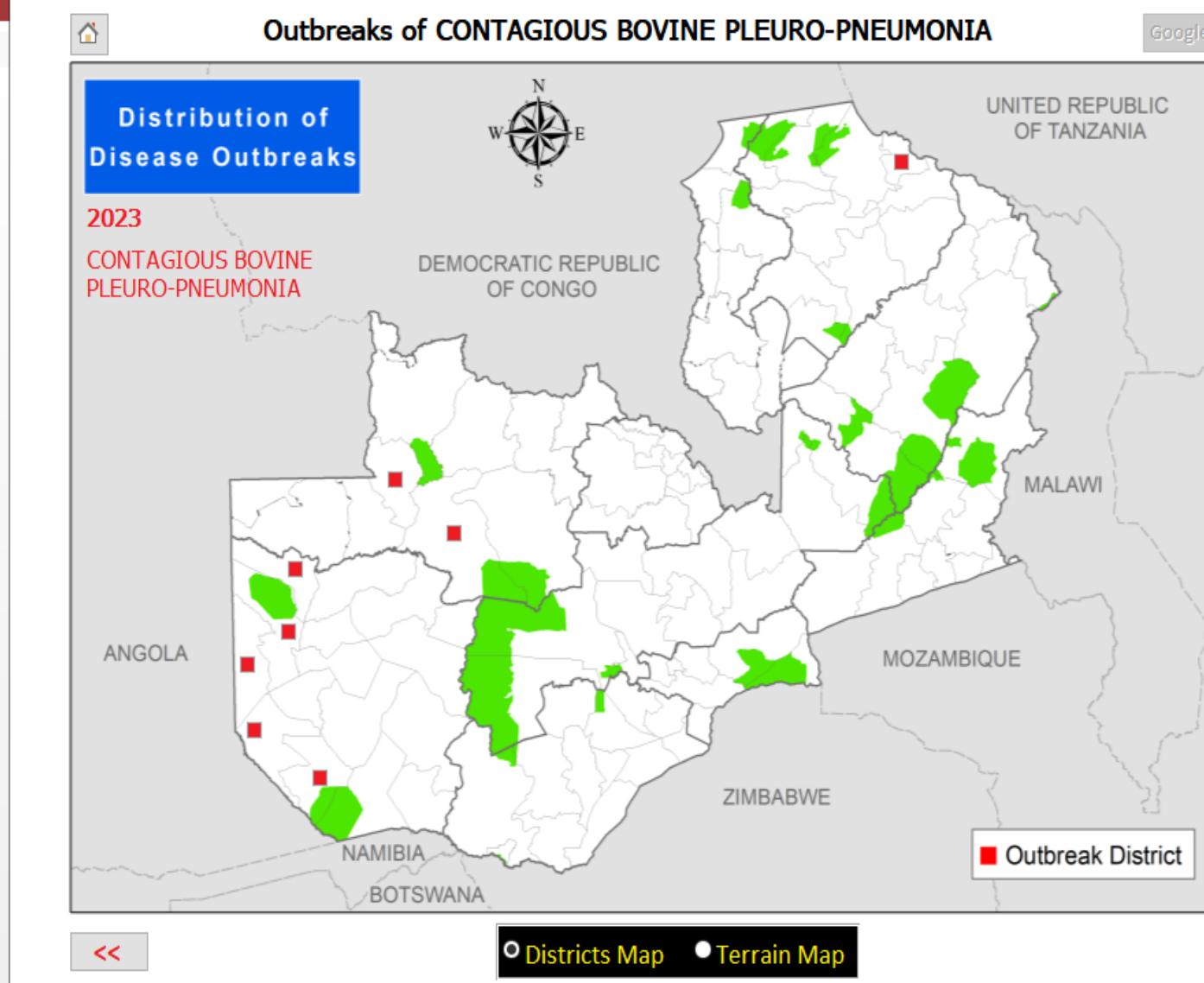
- To see Name of Outbreak District (with date of recent outbreak), put cursor on red square
- To see Map of Outbreak District, click on red square

Annual Distribution of
CONTAGIOUS BOVINE PLEURO-
PNEUMONIA Outbreaks

2022, Nov	Chisamba
2022, Oct	Chisamba
2022, Sep	Chibombo
2022, Sep	Chisamba
2022, May	Nkeyema
2022, May	Senanga
2022, Apr	Mongu

No. of Outbreak Districts : 7

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Contagious Bovine Pleuro-pneumonia

2023

2023

- To see Name of Outbreak District (with date of recent outbreak), put cursor on red square
- To see Map of Outbreak District, click on red square

Annual Distribution of CONTAGIOUS BOVINE PLEURO-PNEUMONIA Outbreaks

2023, Mar	Mbala
2023, Feb	Manyinga
2023, Feb	Mufumbwe
2023, Jan	Kalabo
2023, Jan	Mitete
2023, Jan	Shang'ombo
2023, Jan	Sikongo

No. of Outbreak Districts : 8

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Major challenges and proposed solutions, in terms of technology and in terms of policy

- Lack of reliable CBPP vaccines still poses a major challenge in CBPP control and eradication
- Rampant un-authorized animal movements perpetuate the disease in affected areas and sometimes lead to spread of the disease to clean areas
- Difficult in accessing diagnostic reagents
- Lack of adequate funds to compensate affected farmers

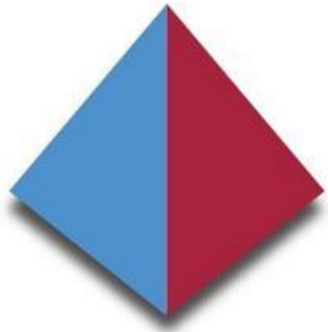


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Conclusions

- Zambia is determined and on course to eradicate CBPP from its territory





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