



Current Status of Cattle Diseases and their Control in Zimbabwe

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Presentation Outline

- Introduction
- Foot and mouth disease (FMD) and its control
- Lumpy skin disease
- Theileriosis
- Anthrax
- Black leg
- Dermatophilosis
- National Blueprints
- Conclusion





Livestock is the backbone of Zimbabwe's agriculture

- About 66% of the population derives its livelihood from agriculture, with 40% doing so from the livestock sector.
- Sector contribution to Zimbabwe's agricultural GDP is about 22%
- This contrasts to 45% contribution in highly developed economies - an indication of a production gap.
- Cattle contributes 33-38% of Agric GDP and provides more than 80% of tillage.





Cattle Census

- The national cattle herd is about 5.5 million & 90% is owned by smallholder farmers
- Cattle raised primarily on natural pastures/veld.
- Supplementary feeding of about 800,000 beef cattle is limited to commercial ranching and A2 farms





Foot and Mouth disease (FMD)

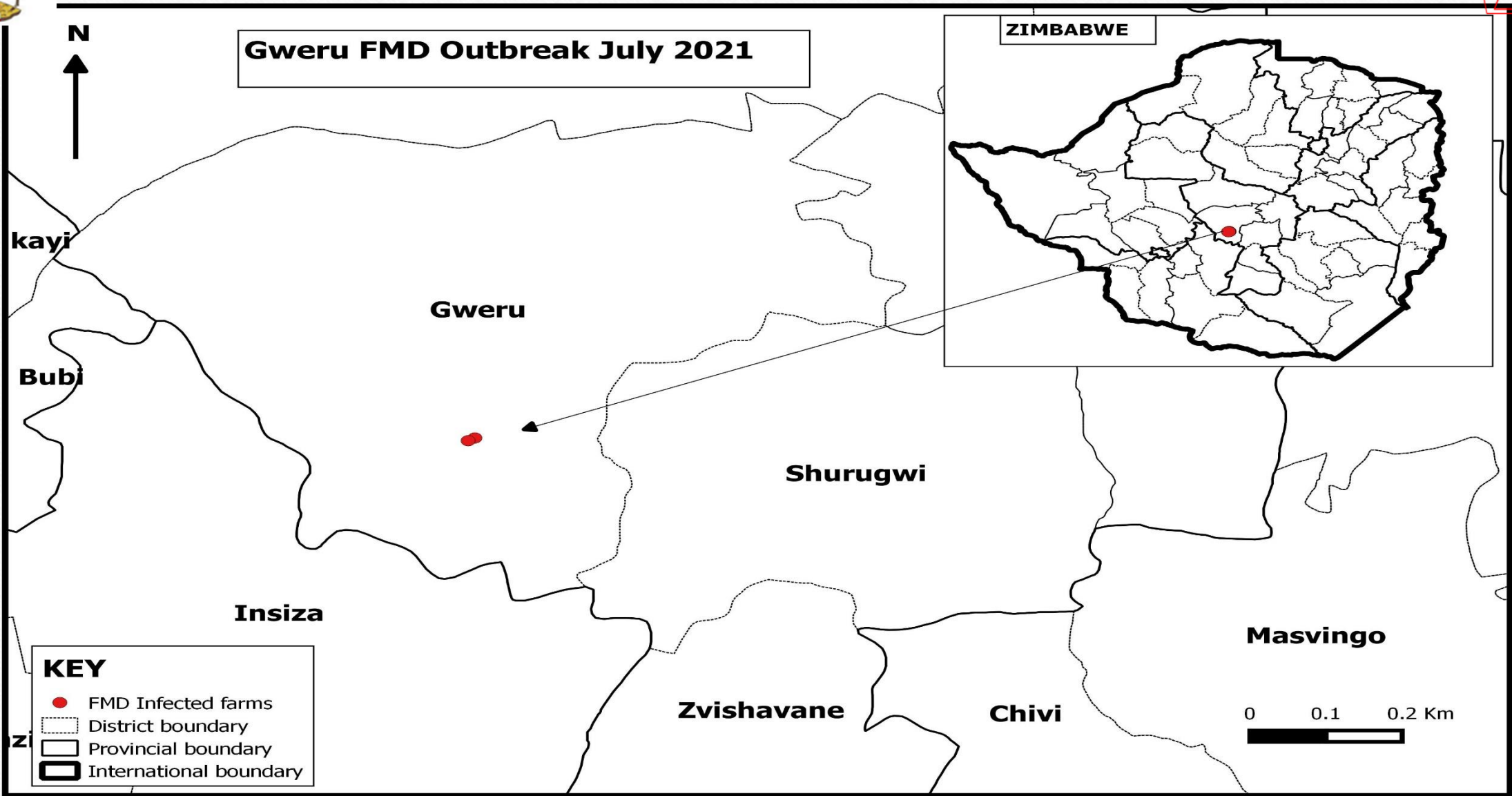
- The country has experience one (1) outbreak since the beginning of the year compared to two (2) outbreaks recorded in 2020.
- Somabula outbreak reported on two neighbouring farms (Grasslands and Browns) in Gweru in July 2021.

Foot and Mouth disease (FMD)

- **Control measures instituted include:**
 - **Affected area placed under quarantine**
 - **No movement of live-cloven hoofed animals in or out of affected areas**
 - **Emergency/Control vaccinations within 10km radius of the outbreak foci**
 - **Surveillance in and around the affected areas through weekly cattle inspections**
 - **Static and roving veterinary check-points mounted to detect illegal animal movements and to ensure compliance with movement restrictions**
 - **Livestock auctions suspended**
 - **Education and awareness campaigns for beef value chain players**

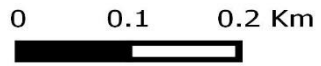


Gweru FMD Outbreak July 2021



KEY

- FMD Infected farms
- ⋯ District boundary
- ▭ Provincial boundary
- ▭ International boundary





FMD Control Measures

- ❖ Movement controls
- ❖ Control and prophylactic vaccinations
- ❖ Surveillance in and around the affected areas
- ❖ Cattle/buffalo separation - Construction of FMD control fence around national parks, 130 km out of 230km have been done at Gonarezhou.
- ❖ Awareness and trainings on biosecurity for beef value chain players



FMD sero-types O and A

- ❖ Zimbabwe is one of the “at risk” countries
- ❖ Zambia and Namibia have reported outbreaks for 2 years and 6 months respectively.
- ❖ Sero-types cause severe clinical disease and deaths especially in small ruminants
- ❖ Cross border liaison meetings
- ❖ Increased animal disease surveillance along the common borders
- ❖ Intensified awareness campaigns along the common borders

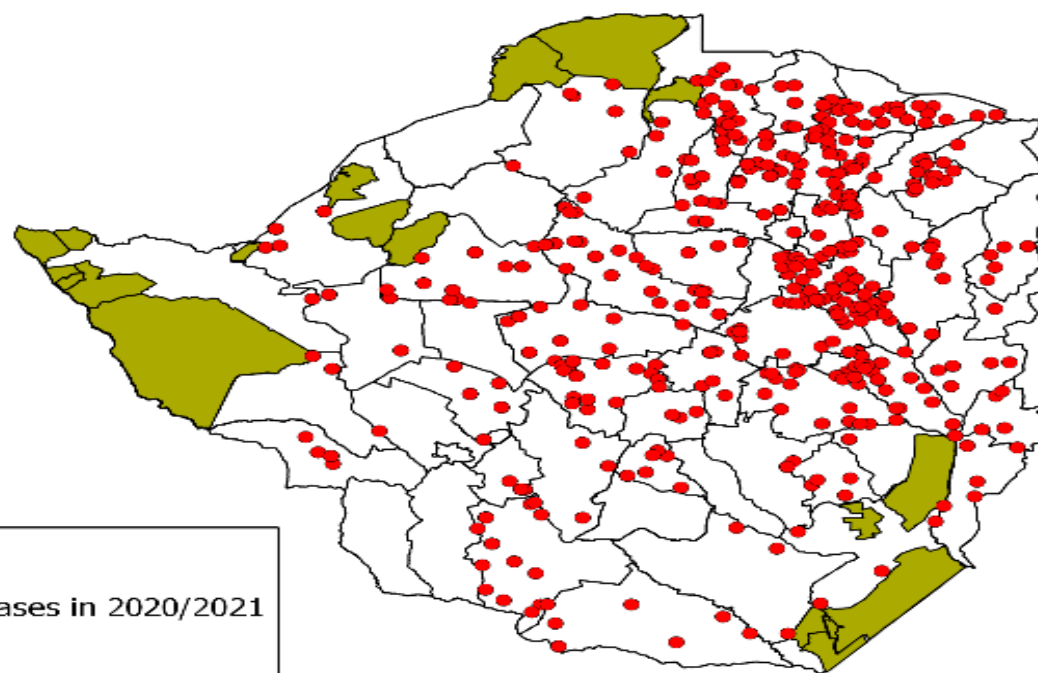


Lumpy skin disease (LSD)

- The disease is seen throughout Zimbabwe and is usually prevalent during the rainy season (December to April) when biting insects are abundant.
- Generally the prevalence is low and the occurrence sporadic but serious outbreaks may develop at intervals usually at interval of 3-5 years.
- Zimbabwe experienced a serious outbreak during the 2020/2021 rainy season due to the abundant rains and consequently abundant biting insects.
- Severe cases reported more in the dry southern provinces (Matabeleland provinces).



Lumpy skin disease 2020/2021



Legend

Dip tanks/farms that reported Lumpy skin cases in 2020/2021



National parks and conservancies



Zimbabwe district boundaries





LSD situation in the past 4 years

Agricultural season	Cases	Deaths
2017/2018	5 939	346
2018/2019	11 488	996
2019/2020	7 600	359
2020/2021	21 540	1883





LSD control measures

- Awareness campaigns are begin carried out throughout the country to educate farmers on prevention and control of the disease.
- The main message is that the disease is a arboviral disease with no known cure. In severe cases of LSD, antibiotics may be used to prevent secondary bacterial infections.
- Vaccination of cattle above 6 months annually should be done in **October-November** before the rainy season.
- In the event of an outbreak, control measures include vaccination of cattle with sterile needles used for each individual animal and strict movement controls.

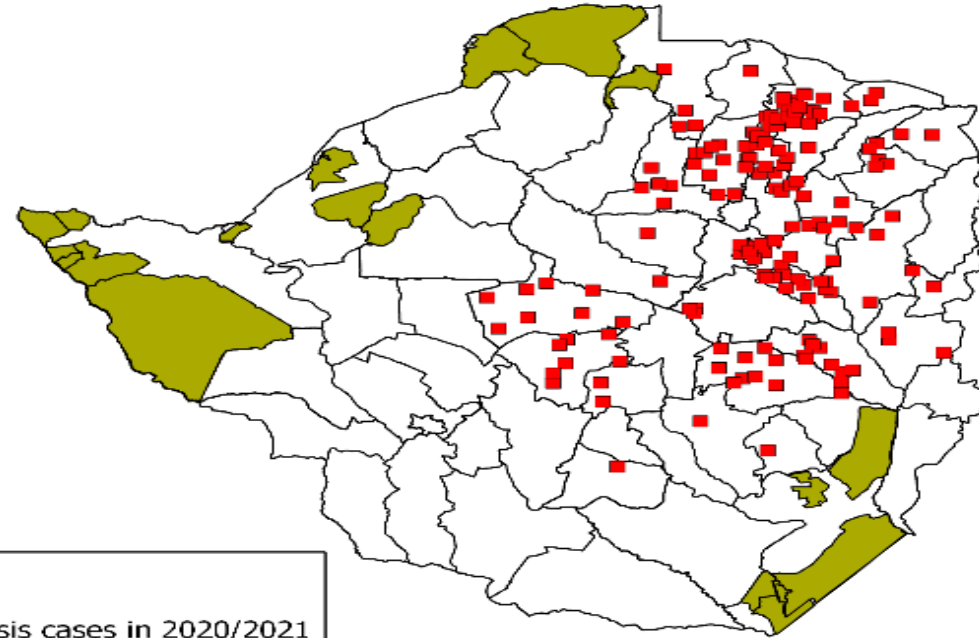


Tick-borne Diseases (TBDs)

- TBDs account for about 67% of all cattle mortalities each year.
- The four main TBDs in Zimbabwe are Babesiosis, Anaplasmosis, Heartwater and Theileriosis.
- Among the four, Theileriosis/January disease has been the most devastating in the last 3 years.
- In 2021, a total of 28 712 cattle deaths due to theileriosis have been reported to date.



Theileriosis outbreaks 2020/2021



Legend

Dip tanks/farms that reported theileriosis cases in 2020/2021



National parks and conservancies



District boundaries





TBDs continued

- Crippling Theileriosis (January disease) outbreaks since 2017/2018
- Theileriosis has been causing the most cattle fatalities in the last three years.
- Disruptions to the DVS run communal dipping program due to inadequate supplies of the acaricides caused by shortage of forex to import raw materials
- The situation has improved greatly with the improved acaricides supply and Blitz tick-grease program.
- Pockets of the disease still remain in A2 and self-contained farms



Response to TBD outbreaks

- **Development of TBDs control strategy under SAFE project**
- **Toll manufacturing of acaricides** - to address the availability and lower the cost of acaricides
- **Blitz tick-grease program** under Presidential input scheme, the 3 year program which is now entering its 2nd year has been a game-changer in the fight against Janine disease (JD)
- **Dip tank construction and rehabilitation** – DVS has a network of 4000 dip tanks
- **Intensive cattle dipping in JD hit areas and vaccine production.**

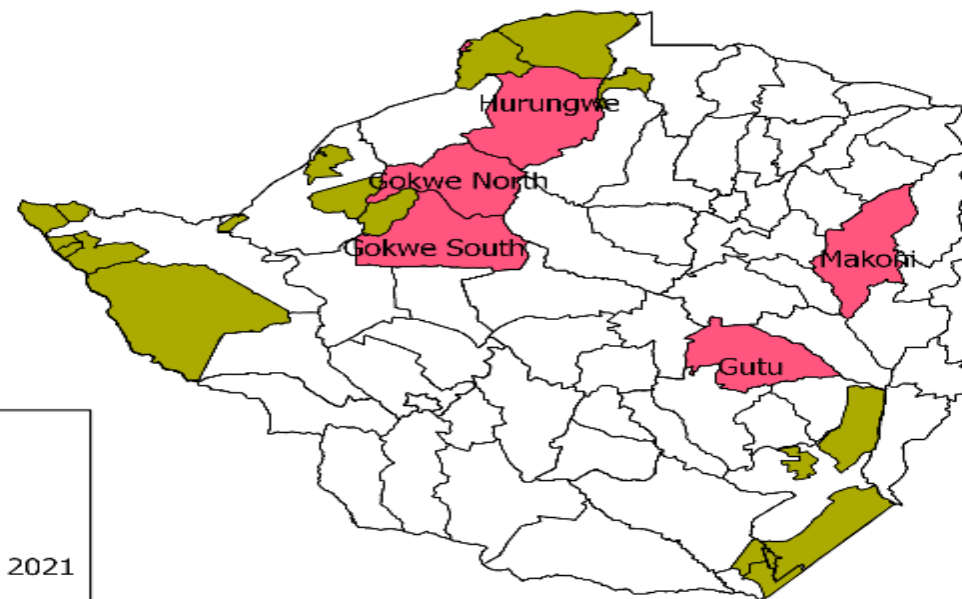


Anthrax

- A total of 63 outbreaks were reported in the last five years in the anthrax hot spots: 2017 (20), 2018 (11), 2019 (20), 2020 (7) and 2021 (5).
- The country is demarcated into gazetted anthrax areas/hot spots for the purposes of vaccination and surveillance.
- These identified hot spots are the target areas for the on-going Government funded national cattle anthrax vaccinations annually – 2 million cattle vaccinated annually
- Joint control strategy with Ministry of Health and Ministry of Environment.
- Vaccinations, movement control and awareness campaigns are the main control measures employed.



Anthrax hot spots 2021



Legend

National parks and conservancies



Districts that reported anthrax cases in 2021



Zimbabwe district boundaries



Anthrax Hot Spot Districts in Zimbabwe





Blackleg/Quarter-evil

- Blackleg is an acute bacterial disease of cattle characterised by swelling of heavy muscles and lameness.
- The disease was reported in all provinces, 50% of the total cases were reported in Matabeleland South and Masvingo province.
- A total of 1075 cases were reported in 2021 compared to 1225 cases in 2020.
- Most farmers have knowledge about the disease and the importance of preventive vaccinations.
- Annual vaccination is main control measure



Dermatophilosis

- Endemic in the country's north west and south western areas
- The highest incidence was in Mashonaland West and Central.
- In year 2021, 1819 cases were reported.
- The disease is reported throughout the year with about 50% of the cases reported in the wet season.
- The world is working on developing a vaccine against this bacterial disease.
- No treatment is definitive but symptomatic treatment with antibiotics.



National Blueprints for Rural Transformation

- Vision 2030 – Zim to be an empowered, prosperous, upper middle income society by 2030
- NDS1, has 11 objectives aimed at achieving Vision 2030, underpinned by -
- Ministry's Agriculture and Food Systems Transformation Strategy (2025-2025)
- Livestock Growth Plan seeks to grow the livestock sector to a 2 billion USD economy by 2025 focusing on:
 - Improved animal health
 - Improved animal nutrition
 - Improved animal genetics
 - Improved veterinary service delivery – capacitation of extension workers
 - Increased private sector participation



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