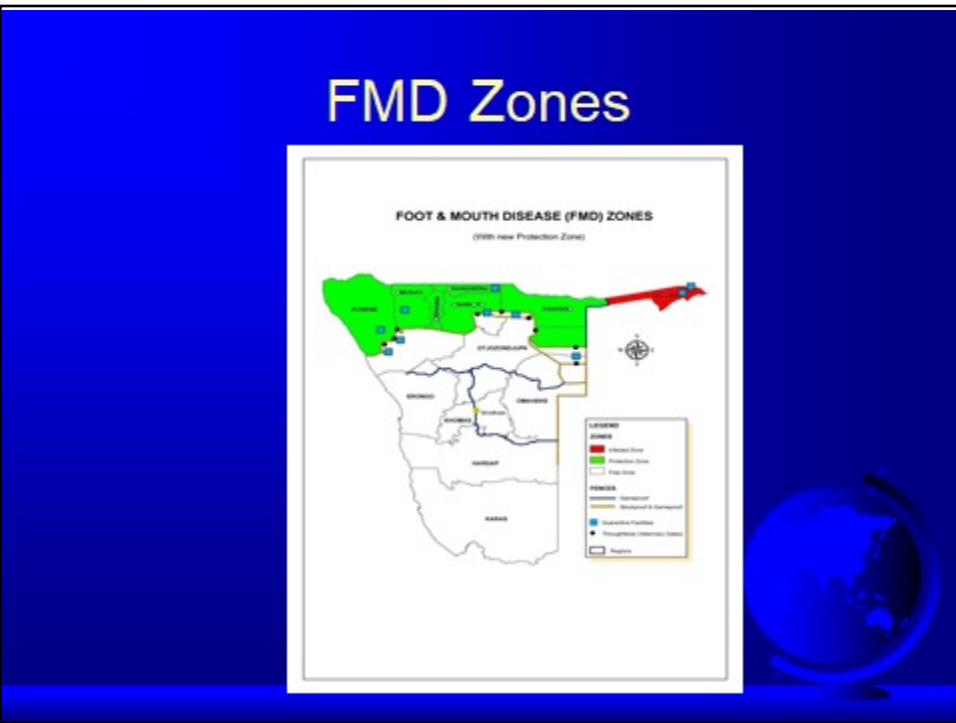




FMD and CBPP situation in the infected zone and proposed way forward

Dr. JK Kapapero
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Katima, Namibia



- ▶ FMD is a severe and highly contagious viral disease with a significant economic impact.
- ▶ The susceptible species include:
 - ▶ Cattle
 - ▶ Pigs
 - ▶ Goats and sheep
 - ▶ Other cloven-hoofed ruminants
 - ▶ In our case buffaloes are the main role player

- ▶ Control measures based on WOAH guidelines
- ▶ Animal health Act, 1 of 2011 (82-91 reg)
- ▶ FMD contingency plans
- ▶ FMD related circulars and memos
- ▶ Any other supporting legislations

History of FMD outbreaks in Namibia 1934 – 2021

Year	Area/District	Type of FMDV	Probable Source	Georef	Control Measures
1934	Gobabis	?	Botswana		Stamping out and movement control Stock free zones
1945	Kavango	?	Botswana		Artificial Infection Stock free zones
1946	Ovambo-Ombalantu	?	Angola		Disinfection 17 cattle destroyed
1949	Kavango	SAT 1	Angola		Stock free zones Cordons Artificial Infection
1956	Eastern Caprivi	SAT 2	Zambia		Artificial Infection
1958	Ovambo/Kaokoland	Valleé A	Angola		Stock free zones Artificial infection Fencing
1960	Eastern Caprivi	SAT 2	Zambia		Stock free zones Artificial infection
1961	Central Districts	SAT 1	Botswana		Game & stock-proof fencing, Cordons Vaccination Artificial infection

History of FMD outbreaks in Namibia 1934 – 2021

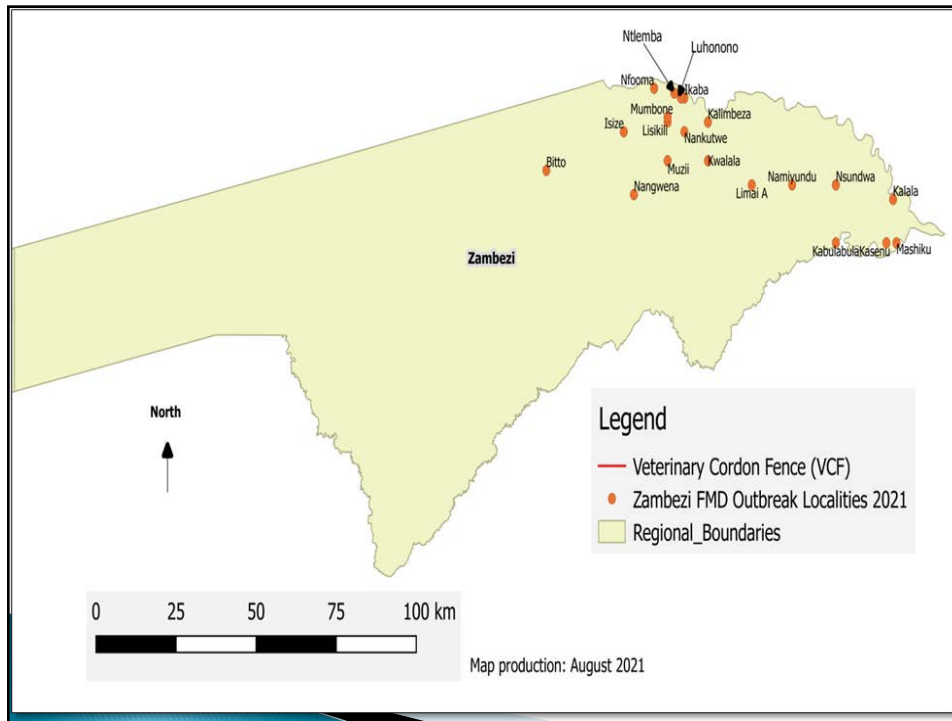
1962	Ovambo (north central Namibia)	A	Angola		Vaccination Cordons
1964	Kalkfield	SAT1	1961 outbreak: Game		Vaccination Cordons
1967	Ovambo	A	Angola		Vaccination
1968	Kavango	SAT 2	Angola		Vaccination
1969	Ovambo	SAT 2	Angola		Vaccination
1970	Ovambo	SAT 2	Angola		Vaccination
1971	Eastern Caprivi	SAT 2	Zambia		Vaccination
1975	Eastern Caprivi	SAT 2	Zambia		Vaccination
1978	Eastern Caprivi	SAT 2	Botswana		Cordon Vaccination
1980	Eastern Caprivi	SAT 1	Zambia		
1989	Eastern Caprivi	SAT 2	Botswana-Buffalo	25.16°E 17.76°S	Movement control, vaccination: bivalent SAT1 & 2
1991	Eastern Zambezi	SAT 2	Botswana-Buffalo	24.06°E 17.81°S	Movement control, ring vaccination
1992	Kavango-Nanazi	SAT 2	Undetermined-?Angola Buffalo	20.64°E 18.15°S	Movement control, ring vaccination then mass vaccination of whole of Kavango (103500 cattle)

History of FMD outbreaks in Namibia 1934 – 2021

1994	Eastern Zambezi-Kasika	SAT 3	Buffalo	24.06°E 17.81°S	Movement control, ring vaccination SAT 1,2 & 3.
Aug 2000	Eastern Caprivi-Kasika	SAT1	Buffalo	24.06°E 17.81°S	Ring vaccination, trivalent SAT1,2 & 3.
Nov 2007	Eastern Zambezi-Nankuntwe, Muzi	SAT 2	Spread from Zambia	24.92E 17.58S	Movement control, ring vaccination SAT 1,2 & 3.
Jul 2008	Kamutjonga	SAT 2	Spread from Botswana	21.66 E 18.14S	Movement control, ring vaccination SAT 1,2 & 3.
April 2010	Impalila Island	SAT1	Buffalo/cattle contact	25.19E 17.80S	Movement control, ring vaccination SAT 1,2 & 3.
Nov 2011	Masikili	SAT1	Buffalo/cattle contact	24.75E 17.88S	Movement control, ring vaccination SAT 1,2 & 3.
Aug 2013	Ivilivinsi	SAT1	Buffalo/Cattle contact	24.95E 17.78S	Movement control, ring vaccination SAT 1, 2 & 3.
2014					
2015	Zambezi (east) Kavango east Kavango west North central	SAT 2 and 3	Buffalo Angola		Movement control, ring vaccination SAT 1, 2 & 3.
October – Nov 2017	Zambezi region (east)		Buffalo		Movement control, ring vaccination SAT 1, 2 & 3.
October –Nov 2019	Zambezi region (east)	SAT 3	Buffalo		Movement control, ring vaccination SAT 1, 2 & 3.

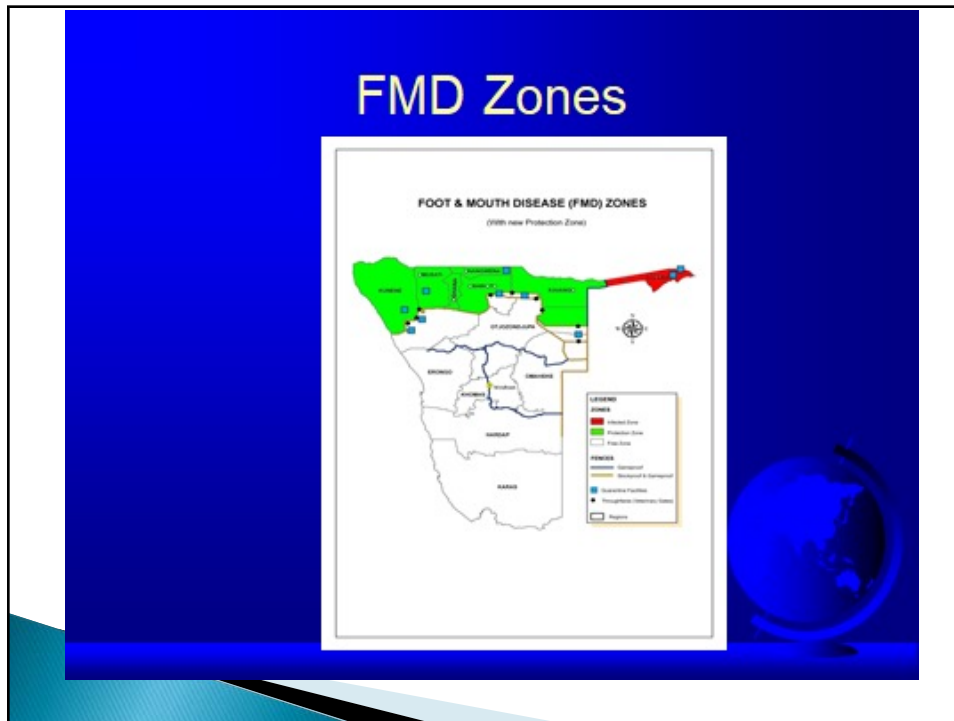
History of FMD outbreaks in Namibia 1934 – 2021

Sept 2020	Kavango east Kavango west Ohangwena Oshikoto	SAT 2	Buffalo/cattle contact		Movement control, ring vaccination SAT 1, 2 & 3.
January 2021	Oshana (Okatyali)	SAT 2	Buffalo / cattle contact		Movement control, ring vaccination SAT 1, 2 & 3.
May 2021	Zambezi (east)	SAT 1 Type 0	Buffalo Zambia		Movement control, ring vaccination SAT 1, 2 & 3.



FMD control

- ▶ Zoning (movement control by mov permits)
- ▶ Vaccination combined with **tagging**
- ▶ **Infected Zone** (tri-annual vaccination)
 - ✓ Trivalent SAT 1,2&3
 - ✓ Monovalent type O
- ▶ **Protection zone** (tri or bi-annual vaccination)
 - *High risk - 3 times*
 - *Low risk - 2 times*
- ▶ **FMD Free zone** (No vaccination)



Impact of FMD Outbreaks in Protection and Infected Zones

- ▶ Loss of income (Local and International)
- ▶ Disturbance of farmers livelihood due to movement restriction of live animals and products
- ▶ Loss of draught power due to severe FMD signs
- ▶ Social implications (Weddings and Funerals)

Challenges in Outbreak Control

- ▶ Porousness of Northern international borders (Angola and Zambia)
- ▶ Illegal movement of cattle between Namibia and neighboring countries
- ▶ Vaccination coverage (depending on time of the year)
- ▶ Cost
- ▶ Introduction of new FMD strain– **work load?**
- ▶ Speed mobilizations of required funds
- ▶ **Lack of physical barriers (un harmonized laws)**

What is next then?

- ▶ Culling of buffaloes???
- ▶ Erection of fences between the borders and within the infected zone???
- ▶ Status quo remains???

Way forward

- ▶ Legislations (all)
- ▶ Farmers education and delegated some duties
- ▶ Stakeholders assistance in control of outbreaks when it happens
- ▶ Development of SOPs with specific roles of each role player
- ▶ Availability of quality vaccine
- ▶ Speedy allocation of resources during outbreaks
- ▶ Invest in research

THANK YOU