FMD vaccines, vaccination and Efficacy in livestock in Uganda

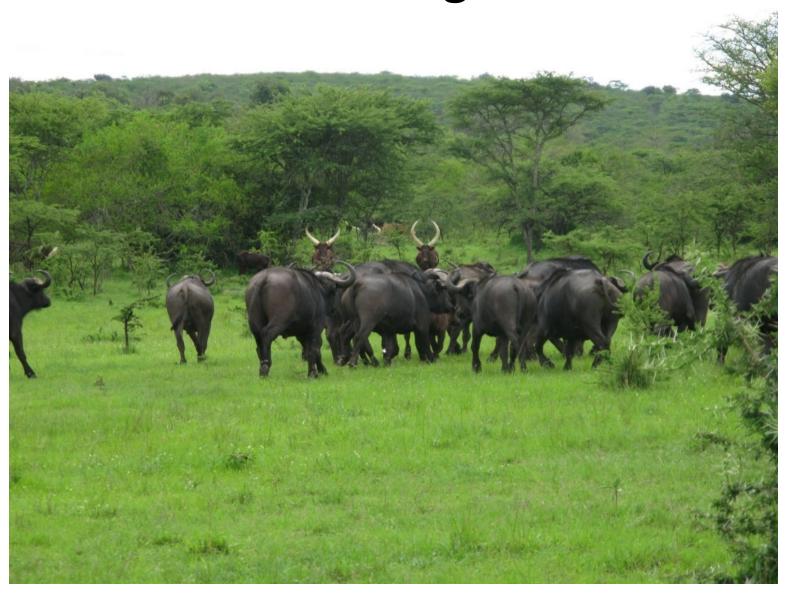
Frank Norbert Mwiine, (Ph.D)

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College of Veterinary Medicine, Animal Resources and
Biosecurity

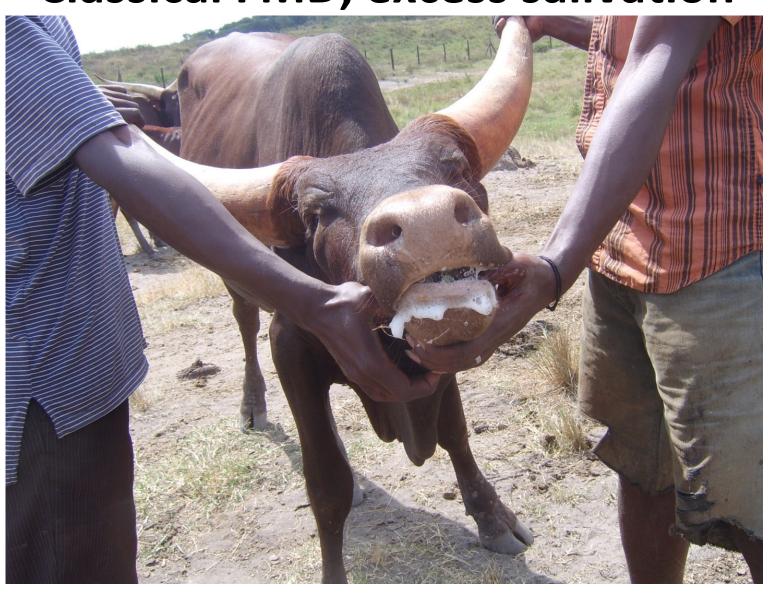
National Livestock population in Uganda

Region	Number of Cattle	Number of Goats	Number of Sheep	Number of Pigs
			Опсер	85
Central	2,475,860	1,676,050	269,600	1307,460
Eastern	2,488,470	2,599,980	319,370	699,680
Northern	1,641,840	2,696,100	568,510	340,460
Karamoja	2,253,960	2,025,300	1,685,500	58,360
Western	2,548,620	3,452,240	567,390	778,350
Total	11,408,750	12,449,670	3,410,370	3,184,310

Cattle grazing with buffaloes in south western Uganda



Classical FMD, excess salivation



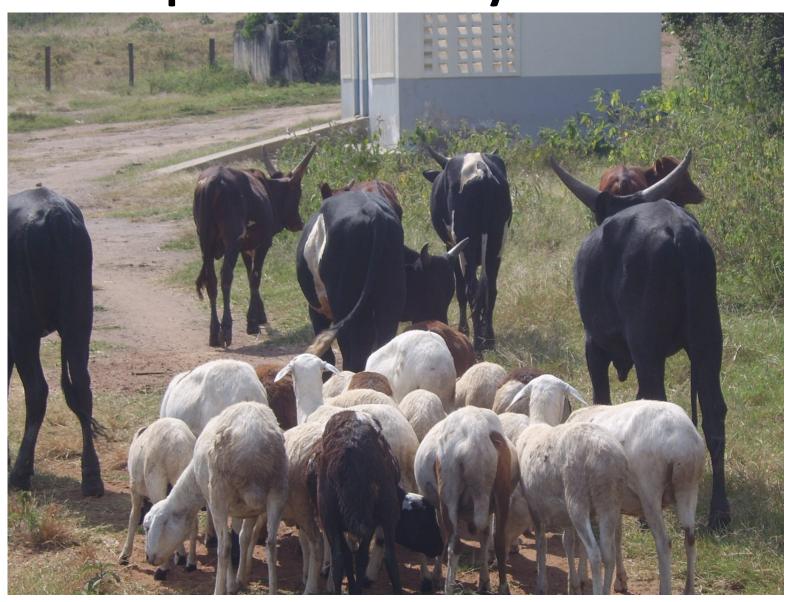
Classical FMD



Classical FMD



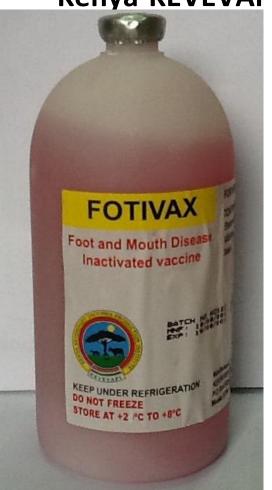
Sheep with clinically sick cattle



FMD Vaccines imported into Uganda

Uganda has imported vaccines mostly from Kenya and Botswana

Kenya-KEVEVAPI



Botswana-BVI



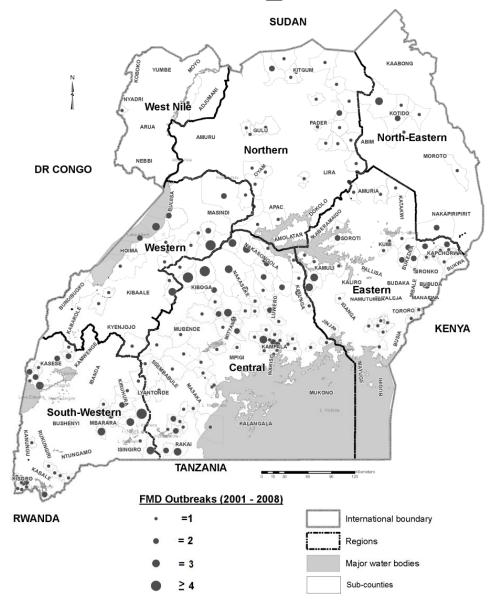
FMD Vaccine types imported and distributed in Uganda since 1996- 2012

Vaccine type	Doses imported	No. of districts covered	Year	Country of Origin /supplier
O/A/SAT2	140,000	17	1996	Kenya/KEVEVAPI
O/A/SAT2	140,000	8	1997	Kenya/KEVEVAPI
O/A/SAT2	260,000	15	1998	Kenya/KEVEVAPI
O/A/SAT2	130,000	2	1999	Kenya/KEVEVAPI
SAT1	50,000	27	2000	Kenya/KEVEVAPI
O/A/SAT1/SAT2	12,450			
O/A/ SAT2	100,000			
O/A/ SAT2	10,000			
O/SAT1/ SAT2	90,000			
O/A/SAT2	50,000	15	2001	Kenya/KEVEVAPI
O/ SAT1/SAT2	200,000			Intervet South Africa
O/A/SAT2	30,000	17	2002	Kenya/KEVEVAPI
O/A/SAT1/SAT2	50,000			Kenya/KEVEVAPI
O/SAT1/SAT2	150,000			Intervet South Africa
O/SAT1/SAT2	50,000	11	2003	Botswana/BVI

FMD Vaccine types imported and distributed in Uganda since 1996- 2012

Vaccine type	Doses imported	No. of districts covered	Year	Country of Origin /supplier
O/SAT1/SAT2	150,000	22	2004	Botswana/BVI
O/SAT1/SAT2	150,000			Kenya/KEVEVAPI
O/SAT1/SAT2	45,000			Intervet South Africa
O/SAT1/SAT2	250,000			Kenya
O/SAT1/SAT2	350,000	18	2005	Kenya/KEVEVAPI
O/SAT1/SAT2	1,2437,000	37	2006	Kenya/KEVEVAPI
O/SAT1	600,000			Botswana/BVI
O/SAT1/SAT2	130,000	16	2007	Kenya/KEVEVAPI
O/SAT1/SAT2	1,200,000	42	2008	Kenya/KEVEVAPI
O/SAT1/SAT2	893,650	32	2009	Kenya/KEVEVAPI
O/SAT1/SAT2	120,000	6	2010	Kenya/KEVEVAPI
O/SAT1/SAT2	520,000	37	2011	Kenya/KEVEVAPI
O/SAT1/SAT2	460,000	14	2012	Kenya/KEVEVAPI

FMD vaccinations around FMD outbreak areas in Uganda



FMD vaccine efficacy

 Uganda does not test FMD efficacy but simply relies on the manufactures

Constraints to vaccine delivery

- Late release of funds by Government to procure FMD vaccines
- Poor cold chain maintenance
- Impassable terrain
- Inadequate transport system/staffing
- Uncooperative farmers

Acknowledgements

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Thank you